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The **NORTH CENTRAL
ASSOCIATION
QUARTERLY**

Association Notes and Editorial Comments

Incentives Used in In-Service Education

North Central Liberal Arts Study

Appraisal of the Liberal Arts Study

What about This Teacher Shortage?

Induction of New Teachers into Service

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THE NORTH CENTRAL ASSOCIATION QUARTERLY

*The Official Organ of the North Central Association of Colleges
and Secondary Schools*

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THE NORTH CENTRAL ASSOCIATION QUARTERLY

Volume XXV

APRIL 1951

Number 4

ASSOCIATION NOTES AND EDITORIAL COMMENTS

COMING UP: ANOTHER LOST GENERATION?

BACK IN 1933, a neighbor's son, a college sophomore, came across the lawn for a little chat. The depression was then very bad and the outlook grim. Youth could only go to school, as we well remember, but after school the prospect was bleak if not well-nigh hopeless. All of this bore down heavily upon the boy as we talked. "You know," said he, "I have never lived in a normal world. First, war; then the boom of the twenties; and now, this."

Eighteen years have passed since the anxious young neighbor unburdened his youthful mind. Both time and space quickly separated us and I lost track of him. But now, at nearly forty years of age, he could again say nothing else but, "I have never *yet* lived in a normal world," because World War II has come and gone, Korea is upon us, mountainous costs well-nigh overwhelm us, and once more the outlook is grim.

Youngsters, caught in this vortex, hear nothing, see nothing, read nothing, that causes them to feel that their elders themselves know where it all is tending. For youth, schooling, employment, marriage, even survival are all in doubt. The effect, however, is beginning to be quite apparent: youth is getting listless, apathetic, despondent. The outlook, it seems, is hopeless from the youngsters' point of view. Teachers are hearing, "What's the use; in three years I'll be dead!" and the rising

rate of dropouts is beginning to attract attention on a nation-wide scale.

The universal feeling of apprehension, our national neurosis, is not only depressing youth of high school and college age; it is pushing children under too. Studies of the atomic-related fears of children show how pathetic their anxieties really are.

These comments would have no place in the editorial columns of the *QUARTERLY* if the Association could do nothing to help; but it can, because it has travelled this road before. The way is not wholly strange and landmarks, through research, have since been set up. It now needs to pick up speed in marshalling its resources and going to work while there is still time as one news writer put it "to save youth from ourselves." Through consolidating our resources, pooling our efforts, and giving a sense of direction to our educational endeavors, the Association can do much to prevent another lost generation.

HARLAN C. KOCH

ABRIDGED PROGRAM OF THE FIFTY-
SIXTH ANNUAL MEETING OF THE
ASSOCIATION

March 27-31, 1951

ON MARCH 27 the Association convened for its fifty-sixth annual meeting. Only once since it was organized in 1895 has it met elsewhere. The central location of the Windy City with its superior railroad connections has

made it attractive as a meeting place for the big annual gathering. This year the theme was "Education for the Improvement of human Relationships."

For those who are interested in the work of the Association but could not be present the following abridged program is published.

Six individuals addressed the three general sessions of the Association:

James A. Lewis, Superintendent of Schools, Dearborn, Michigan.

Edward G. Olsen, Associate Professor of Educational Administration, University of Texas, Austin

Mrs. Eleanor Roosevelt, United States Representative to the United Nations

Harlan W. Hamilton, Dean, School of Arts and Sciences, Western Reserve University, Cleveland, Ohio

John W. Gardner, Vice President, Carnegie Corporation of New York

Ahmed S. Bokhari, Permanent Representative of Pakistan to the United States

Preliminary Program Announcement

TUESDAY, MARCH 27

8:30 A.M. Meeting of State Chairmen of the Commission on Secondary Schools (serving as the Reviewing Committee on New Schools)

1:30 P.M. Meeting of State Committees of the Commission on Secondary Schools

4:00 P.M. Meeting of Chairmen, Assistant Chairmen, and Secretaries of Reviewing Committees of the Commission on Secondary Schools

7:30 P.M. Meeting of Reviewing Committees and the Commission on Secondary Schools

WEDNESDAY, MARCH 28

8:30 A.M.—4:00 P.M. Meeting of Reviewing Committees of the Commission on Secondary Schools

2:00 P.M. Executive Session of the Commission on Colleges and Universities (for members of the Commission only)

4:00 P.M. Meeting of State Chairmen and Chairmen of Reviewing Committees of the Commission on Secondary Schools

THURSDAY, MARCH 29

9:00 A.M. Executive Session of the Commission on Colleges and Universities (for members of the Commission only)

9:00 A.M. General Business Meeting of the Commission on Secondary Schools (open to all persons interested)

9:30 A.M. Conferences of the Commission on Research and Service. W. Fred Totten, Flint Junior College, Flint, Michigan (General Chairman)

1. "Citizens' Committees and Public Relations"—Paul Misner, Superintendent of Schools, Glencoe, Illinois (Chairman)

2. "What Should be Our Thinking Now About Guidance and Counseling"—J. Fred Murphy, Broad Ripple High School, Indianapolis, Indiana (Chairman)

3. "Fraternalities and Sororities—What are the Best Approaches?" B. L. Shephard, Assistant Superintendent in Charge of Secondary Schools, Tulsa, Oklahoma (Chairman)

4. "Role of the Liberal Arts College in a National Emergency"—Russell M. Cooper, University of Minnesota, Minneapolis (Chairman)

5. "Military Service in Relation to Educational Planning"—Harland White, Purdue University, Lafayette, Indiana (Chairman)

6. "The Education of Teachers in a Period of National Emergency"—John E. Jacobs, Kansas State Teachers College, Emporia, Kansas

1:30 P.M. General Meeting of the Commission on Colleges and Universities

Address: "Higher Education in a Balanced Conception of National Security"—Charles E. Odegaard, Executive Director, American Council of Learned Societies, Washington, D. C.

2:00 P.M. Professional Meeting of the Commission on Secondary Schools

Theme: "Education for Improved Family Relations"

George A. Beck, Central High School, Duluth, Minnesota (Chairman)

"Challenges to Schools for Teaching Improved Family Relations"—Mrs. Evelyn Millis Duvall, Executive Secretary and Consultant for the National Council on Family Relations

"Implications for the Educational Programs of the Secondary Schools"—Edward W. Stubbs, Proviso Township High School, Maywood, Illinois

"How Shall We Prepare Teachers for Participation in Family Life Education?"—B. F. Timmons, University of Illinois, Urbana

2:00 P.M. Meeting of the Commission on Research and Service (for Members of the Commission only)

3:00 P.M. Business Meeting of the Commission on Colleges and Universities

4:00 P.M. Open Conference on Teacher Education (Complex Institutions)

7:30 P.M. Executive Session of the Commission on Secondary Schools (for members of the Commission only)

7:30 P.M. Discussion Groups on Problems of In-Service Education (Planned and Organized by the Subcommittee on In-Service Education of Teachers of the Commission on Research and Service)—Paul E. Harnly, Wichita Public Schools, Wichita, Kansas (Chairman)

1. General Education, Core, and Common Learnings as a Means of Stimulating Instructional Improvement—M. B. Sailsbury, Evanston Township High School and Community College, Evanston, Illinois (Chairman)
2. The Community College and Adult Education—W. Fred Totten, Flint Junior College, Flint, Michigan (Chairman)
3. Training the Staff for Improved Public Relations—M. W. Stout, University of Minnesota, Minneapolis
4. Improving High School-College Relationships—Paul R. Pierce, Assistant Superintendent in Charge of Instruction and Guidance, Chicago (Chairman)
5. Who is Responsible for Guidance in the Secondary School?—R. S. Cartwright, Elgin High School, Elgin, Illinois (Chairman)
6. Mental Health as it Affects the Classroom—T. R. Ehrhorn, Senior High School, Rochester, Minnesota (Chairman)

FRIDAY, MARCH 30

9:30 A.M. First General Meeting of the Association

Theme: "Education for the Improvement of Human Relationships at the Community Level"

Speakers: James A. Lewis, Superintendent of Schools, Dearborn, Michigan
Edward G. Olsen, Associate Professor of Educational Administration, University of Texas, Austin

2:00 P.M. Second General Meeting of the Association

Theme: "Education for the Improvement of Human Relationships at the National Level"

Speakers: Mrs. Eleanor Roosevelt, United States Representative to the United Nations
Harlan W. Hamilton, Dean, School of Arts and Sciences, Western Reserve University, Cleveland, Ohio

7:30 P.M. Conference of High School Principals and the Commission on Secondary Schools
Theme: "Innovating Practices in Schools"

Panel Discussion:

Alvin D. Loving, Northwestern High School, Detroit, Michigan (Moderator)
Mrs. Charlotte L. Grant, Oak Park and River Forest High School, Oak Park, Illinois

Miss Mildred Polak, Horace Mann School, Gary, Indiana
Miss Bernice M. Scott, North High School, Sheboygan, Wisconsin
Linus Dowell, Central High School, St. Joseph, Missouri

SATURDAY, MARCH 31

9:00 A.M. Third General Meeting of the Association

Theme: "Education for the Improvement of Human Relationships at the International Level"

Speakers: John W. Gardner, Vice President, Carnegie Corporation of New York
Ahmed S. Bokhari, Permanent Representative of Pakistan to the United Nations

MILITARY SERVICE AND COLLEGE ENROLLMENTS

IN RESPONSE to the compelling interest of higher educational institutions in the effect of recruitment for the Armed Services upon student enrollments, the Office of Education, ESA has released the following estimate of full-time male undergraduate students and male graduates at the bachelor's and first professional degree level for the five-year period, 1950-51 to 1954-55. The point of reference is the proposed Universal Military Service and Training Bill (S. 1; H.R. 1752). The Office of Education wants it to be understood that the figures are estimates only.

TENTATIVE PROJECTION OF NUMBER OF FULL-TIME MALE UNDERGRADUATE ENROLLEES AND FOUR-YEAR MALE COLLEGE GRADUATES, 1950-51 to 1954-55

Academic year	Full-time undergraduate male college enrollees (Estimated)	Four-Year male college graduates (Estimated) ¹
1950-51	1,059,000	274,700
1951-52	844,800	205,300
1952-53	757,600	202,200
1953-54	719,500	178,000
1954-55	690,200	166,900

¹ Includes also first professional degrees in medicine and dentistry.

INCENTIVES USED IN IN-SERVICE EDUCATION OF TEACHERS

N. DURWARD CORY

Superintendent of Schools, Rochester, Minnesota

WHY DO SOME TEACHERS grow in service more than others? What are the various incentives which make teachers more concerned about growth and more desirous of moving toward better professional goals? What can a conscientious supervisor or administrator do to stimulate greater in-service growth? Do teachers feel that having an opportunity to discuss mutual problems and assist in their solution is a desirable incentive? What about salary increments, recognitions given for committee work, orientation programs for new teachers, improvement of health and social welfare as incentives to growth?

Such questions as the above have long been of interest to alert school people and have had an especial challenge to the Sub-Committee on In-Service Training of Teachers of the Commission on Research and Service. This article is a progress report on the study of incentives which was started in 1948 when the committee selected the present writer to act as research consultant. Since that time regular meetings have been held by the committee; the research consultant and Dr. R. W. Holmstedt, of the School of Education, Indiana University, who has served as faculty adviser.

In order that the committee might clarify its purposes, definitions were made of in-service education and of incentives. In-service education was assumed to be the sponsoring or pursuance of activities which would bring new insights, growth, understanding, co-operative practices, democratic procedures and community understanding to the members of the staff and to arouse them to action to improve the

curriculum, to take additional training and to improve themselves and their work in every possible manner.

Incentives were assumed to be those conditions and procedures which contribute toward making the teacher more concerned, and more desirous and willing to grow; to move toward higher and better professional goals; and to work more harmoniously and co-operate more intelligently with teachers, the community, and the administration in the process of developing adequate educational opportunities for pupils.

In the months that followed, information which might be of value in the study was learned through a perusal of the literature, visits and discussions with administrators working with teachers toward teacher improvement, obtaining data on city wide programs of in-service education, and attendance at panels and discussions on in-service training. A list of all suggestions and ideas was made together with a tentative breakdown of topics which might be helpful in dividing the study into various phases for individual study and interpretation.

The members of the committee believed that the study could best be made by the questionnaire method. A questionnaire was devised and several refinements were made upon the suggestions of the various committee members. In March, 1950, it was decided to ask a limited number of principals and teachers to answer the questionnaire on a trial basis. Forty-three mimeographed questionnaires were completed and the answers tabulated. On the basis of these returns the questionnaire was shortened to

approximately three-fifths of its original length and printed as an eight-page booklet. Separate booklets were prepared for principals and teachers; however, except for the data concerning the school on the first page of the principals' questionnaire, and the data concerning the teacher on the teachers' questionnaire, and the fact that one was printed on blue paper and the other on yellow, the questionnaires were alike.

The questionnaires were divided into fifteen sections as follows:

- I. Purpose of the Study.
- II. Information Concerning the School Making the Report (in the principals' questionnaire) and Information Concerning the Teacher Making the Report (in the teachers' questionnaire).
- III. Definitions of In-Service Education and Incentives.
- IV. Explanation of Evaluations To Be Made in the Study.
- V. Administrative Policies and Procedures.
- VI. Supervision—Professional Improvement.
- VII. Curriculum Planning.
- VIII. Experimentation and Research.
- IX. Orientation of New Teachers.
- X. School Community Relations.
- XI. Salary Policies.
- XII. The Lengthened School Year.
- XIII. Health, Social Welfare, and Environment.
- XIV. Most Promising Incentives Used in the School.
- XV. Problems Encountered in Establishing the Incentive Program.

In sections V through XIII, the principals and teachers were asked to evaluate and to check the use in their schools of groups of practices which had been found of value in the literature. Section XIV, Most Promising Incentives Used in the School and Section XV, Problems Encountered in Establishing the Incentive Program, were answered by statements in outline or anecdotal form.

The chairman of the subcommittee directed letters to the state department of each state asking for the names of high schools which were doing excellent

work in the field of in-service education. Replies were received from nearly all states. Additional letters were sent to colleges of education and to North Central officers in cases where additional names were needed or where no reply had been received. A few schools known to have above average programs were added to this group by members of the subcommittee. Every effort was made to secure the names of small high schools with good programs as well as the names of large high schools.

Letters inviting the schools to participate in the study were mailed to the principals of these schools and nearly all of them replied favorably, a few were participating in other activities and did not wish to participate this year. Returns including 250 from principals and more than 1150 from teachers, have been received from approximately 250 schools, and the results are in the process of tabulation.

Visits to three or four of the schools which appear to have excellent programs are being planned in order to determine first hand the way in which the incentives operate to improve the in-service program.

It has been the belief of the committee that a study of incentives used in in-service education of teachers would help to discover the more effective means for stimulating and promoting the professional growth of teachers. The resulting improvement of in-service education activities should raise the standards of our schools.

It is too early to predict the results which will come from the questionnaires, although a few things are already evident. It is apparent that many teachers enjoy participation in the solving of their own problems and that both principals and teachers believe that they grow from the participation. Many individuals commended

the period of time provided for in-service education prior to the opening of school in the fall.

John A. Ramseyer, Director of the University School, Ohio State University, Columbus, Ohio, in a letter returned with his completed questionnaires stated a common point of view when he said, "In general, we are agreed that our greatest incentive for continued study is the opportunity and

responsibility for building our own program."

It is expected that completion of the tabulations, making charts, interpreting the data and writing up the study with suggestions for a program in the member schools can be completed during the current summer. A final report will be made to the member schools as soon as this work has been completed.

THE NORTH CENTRAL LIBERAL ARTS STUDY

CLARENCE LEE FURROW
Knox College, Galesburg, Illinois

IN RECENT MONTHS there have come an increasing number of requests from all over the country asking for details of the North Central Study on Liberal Arts Education. Several observers have pointed to it as the most extensive and penetrating program for strengthening liberal arts education to be found anywhere in America today.

The origin of the Study dates back to a committee appointed by the North Central Association in 1938 to discover the answer to the question, "What should be the subject matter preparation of secondary school teachers?" After two years of study and a provocative report, a questionnaire was sent to the liberal arts colleges of the Association to determine whether they endorsed the principles and practices proposed. The answer to this query resulted in the organization of a special committee, the North Central Association Committee on the Preparation of High School Teachers in Colleges of Liberal Arts, with Dr. Russell M. Cooper as secretary, to study further teacher education practices in the liberal arts colleges.

In 1940 this special committee surveyed twelve liberal arts colleges in the North Central territory, issued its findings in the form of a mimeographed report. This report recognized that the problems of teacher education touched all phases of the curriculum and suggested broader implications than those related to professional training alone.

To carry the findings of these surveys to the colleges in the North Central Association territory, ten regional conferences were held in the spring of 1941. These week-end conferences proved successful and stimulating, but

they revealed the need of a systematic study to discover and design the improvements for programs of teacher preparation.

To take the next step, a letter of invitation to join the Study was sent to 205 colleges in the North Central region. From eighty-one favorable responses, twenty-eight colleges from fourteen states were selected representing a cross section of Liberal Arts education. The initial step of the new Study took the form of a Workshop in Higher Education held at the University of Minnesota in the summer of 1941. The staff of this first workshop included Dean Wesley E. Peik, Professor G. Lester Anderson, Dr. Ruth E. Eckert, Dr. C. Gilbert Wrenn all of the faculty of the University of Minnesota, Dr. Earl J. McGrath, of the University of Buffalo, and Dr. Russell M. Cooper, of Cornell College.

In 1941 this twenty-eight college study, guided by the Subcommittee on the Preparation of High School Teachers in the Colleges of Liberal Arts, sought as its initial objectives to discover sound educational practices, to encourage educational experimentations and to improve the subject matter preparation of high school teachers. The response of the colleges was most gratifying. After three years of co-operative study and experimentation the first report, *Better Colleges—Better Teachers*, was published by the Committee through the Macmillan Company.

In 1944, because the funds provided by the General Education Board were nearly exhausted, the sponsoring committee considered whether the program should be continued. Again the col-

leges of the North Central Association were consulted and a great interest was displayed. As a result the program was expanded to include seventy-five colleges. In June, 1945, the reorganized Study sponsored jointly by the participating colleges and the North Central Association, and financed by the member colleges, entered a new era of growth and development.

This expansion in membership, organization, staff, and services resulted in the adoption of a more accurate descriptive title, the *Committee on Liberal Arts Education*. The staff included three coordinators drawn from subject matter fields of the member institutions. Since 1945 the Study has been steadily increasing its scope of activities and service. In addition to its services to the participating colleges, it has furnished consultants, sponsored inter-collegiate conferences, and cooperated with numerous state and national organizations concerned with higher education.

Because of the multitude of problems confronting higher education since the war, the colleges have been motivated to re-examine their philosophies, policies, and practices. As a result of this new interest in higher education the Study moved into a new area of service. While continuing its program of orientation and appraisal of the new trends in liberal arts education, the North Central Association's Committee on Liberal Arts Education expanded its services to include systematic research in higher education. To meet these new needs the sponsoring committee obtained a \$21,000 grant from the Carnegie Corporation, of New York.

In June, 1948, the new year opened with a nearly full-time Director of Study and a staff of six coordinators. The Study is now engaged in an effort to work out cooperative research rela-

tions between the member colleges, the research professors, and the graduate colleges of our great universities. In several states the Study is enlisting the aid of the state departments of education in planning and conducting inter-collegiate regional conferences on important educational issues and problems. The coordinators are assisting the colleges to define, organize, and execute systematic studies on the campuses of the member colleges in order that faculties may discover evidence to assist in policy making, curriculum revision, and instructional improvement.

The North Central Study is an ongoing, round-the-year, self-study program. The sponsoring committee serves as a coordinating agency and the success of the program depends upon the full cooperation of the participating colleges. The services afforded by the North Central Committee on Liberal Arts Education are briefly described in the following paragraphs.

The workshop in higher education was inaugurated primarily as a service to the participating colleges. It is designed to assist in the development of faculty leadership and to foster clearer understanding of current educational issues and trends. The workshops are essential to the continuing development of local leaders who carry on the year-round program on the campuses. One workshop is held during the first term of the summer session at the University of Minnesota and the second at the University of Chicago during the second summer session term.

Each summer a week-long session for presidents of the participating colleges is held at the University of Minnesota. Matters of educational policy and administration usually form topics of study in the presidents' sessions.

The Director of Study serves as the secretary of the sponsoring committee

and as the executive officer of the program. The Director of Study attempts to give an over-all coordination to the numerous activities and functions of the program. He serves as editor of the *North Central News Bulletin*.

The Coordinators are for the most part subject matter teachers, fellow faculty members who themselves are vitally interested in the improvement of the total college program. They visit the member institutions for the purpose of assisting the faculty as a whole, or individuals, passing on ideas which they have acquired in their visits to other institutions. The Coordinators will visit each institution during the year and through correspondence render continued service throughout the year.

The *North Central News Bulletin* is a mimeographed publication issued monthly from October through May. It is designed to keep the colleges abreast of the new developments in the program. In addition to the *News Bulletin*, a packet of materials, reports, and documents is distributed to the member colleges and to a selected group of interested educational leaders and agencies.

A resource file of education materials dealing with almost every phase of

higher education has been organized and is available on loan to any institution on application. There are nearly two hundred folders of reports, syllabi, reprints of published studies, documents, and exhibits.

During the last ten years more than twenty-five week-end intercollegiate regional conferences have been sponsored by the committee and the participating colleges. These conferences serve two distinct purposes: to report on institutional developments within the program and elsewhere, and to share with non-member colleges and neighboring institutions the results of the cooperative study in liberal arts education.

The Study is now engaged in a project to establish cooperative arrangements with graduate schools in order to secure joint collaboration on research on problems related to liberal arts education and of concern to the liberal arts colleges.

Recently leaders of the Study have been invited to present the liberal arts point of view in various regional and national educational meetings. Members of its staff have served on committees and as consultants in regional and national conferences on higher education.

APPRAISAL OF THE LIBERAL ARTS COLLEGE STUDY

ANNE C. GREVE

Bethany Peniel College, Bethany, Oklahoma

FOR OVER TEN YEARS, one of the distinctive activities of the North Central Association has been the study directed by the Committee on Liberal Arts Education. There have been several cooperative studies among colleges in recent years, but this North Central project has involved more institutions and has continued for a longer period than any other such program.

Indeed, the study is still flourishing and bids fair to continue for many years to come. With the drastic readjustments caused by the current mobilization, the need for cooperative systematic study of campus problems will doubtless be greater than ever.

Since these intercollegiate studies have sought to appraise the practices of higher education, it seems only proper that one turn a searchlight on the techniques and effectiveness of the cooperative study itself. Information thus revealed should prove useful not only in the perfecting of this North Central program but also in providing bench marks for other cooperative studies that may be undertaken in the future.

BACKGROUND OF THE STUDY

The program was launched in 1940 as a project of the Committee on Teacher Education of the Commission on Research and Service. A report on the "Subject Matter Preparation of High School Teachers" in 1938 had highlighted some of the crucial issues in teacher education. Subsequently, a subcommittee on the Preparation of High School Teachers in Colleges of Liberal Arts was created to consider the application of these principles in

liberal arts colleges of the area. During the fall of 1940, the secretary of this subcommittee spent a week at each of twelve representative liberal arts colleges and with a staff of assistants sought to determine the character of teacher education in those institutions. The findings of this survey were summarized in a 20-page mimeographed report.

During the spring of 1941, ten regional conferences were held throughout the North Central territory to share the findings of the survey and to discuss the issues which had emerged. It was recognized that sound teacher education involves not only professional education courses, but also the general educational development of the prospective teacher, his mastery of his subject field, and his personality development. Indeed his preparation involved virtually the entire program of the institution. In order to improve college programs at these many points, it was agreed that there was need for educational experimentation and research in order to determine what constitutes sound practice. In recognition of the college-wide nature of this interest, the name of the committee was eventually changed to the Committee on Liberal Arts Education.

Following the conferences of 1941, the sponsoring committee determined to set up a cooperative study to promote experimentation and research among a selected group of interested liberal arts colleges. From among eighty applicants, twenty-eight colleges were chosen and these became the nucleus of the program for the next several years.

From the beginning, this study was

recognized as a grass-roots affair. The autonomy of each institution must be preserved and each college faculty must be urged to examine its own needs and study its own problems in its own way. Hence, the activities really developed from the expressed needs of the colleges themselves. Each institution chose a local director of studies, with a committee to advise him, and this director was typically a professor in some academic field who was a recognized faculty leader. Usually he was untrained in educational research but was known to be vitally interested in educational problems.

The sponsoring committee planned summer workshops to give the local directors and other campus representatives an opportunity to study their experiences. A staff of consultants gave direction and help during the workshop sessions. Regional conferences were provided to stimulate local staffs and to contact faculty members not reached by the summer workshops. News bulletins and packet materials, including reports of local studies and other materials of general interest, were distributed monthly during the academic year to share experiences and to assist colleges in building a file of resource materials. Visiting coordinators were used to stimulate local study and to give such assistance as seemed advisable.

During the period from 1941 through 1948 more than \$53,000 was expended for central activity, and more than \$25,000 is known to have been expended by the participating colleges in local activities. The amount spent locally is difficult to determine since many colleges had not kept records separate from the total educational budget. The time, effort and ingenuity of many staff members and administrative officers were devoted to the program, seldom with any reckoning of the specific costs of these services.

PURPOSES AND SCOPE OF THE PRESENT INVESTIGATION

Since the Liberal Arts Education Study entered a new phase of activity in 1948, in which almost full-time leadership was assigned to an executive secretary and additional financial assistance secured for expanded services, it has seemed desirable to investigate the various phases of the program prior to that date to discover what was accomplished.

Since the progress of the Study from 1941-1943 has been reported by Russell M. Cooper in *Better Colleges—Better Teachers*,¹ the present investigation is largely limited to the period of 1943-48. References are made to the earlier period simply to trace the history and development of the project. The program since 1948 has followed essentially the same pattern as here described.

This report seeks to describe the development of the Study, to identify the major contributions, and to point out certain problems which arose in connection with the workshops, the conferences, the visits of the coordinators, and the distribution of Study materials. An effort has also been made to discover changes in the colleges which might reasonably be attributed to participation in the North Central Study and to identify the Study practices which seem to be associated with satisfactory local progress.

INFORMATION FOR THIS INVESTIGATION

Some information was obtained from the minutes of the meetings of the sponsoring committee, from financial records filed with the Executive Secretary, and from the monthly *News Bulletins*. The bulk of the information was collected from two questionnaires, one sent to college representatives and

¹ Russell M. Cooper, *Better Colleges—Better Teachers*. Chicago: Macmillan Company, 1944. Pp. 167.

the other to the coordinators, and from interviews with selected administrators and faculty members in the 1948 workshops at the University of Minnesota and the University of Chicago.

ORDER OF PRESENTATION

This report will present a brief history of the North Central Liberal Arts Study, and a report of the various services offered by the sponsoring committee to the colleges: the summer workshops, regional conferences, materials distributed to the colleges, and visits of the coordinators. Local campus projects will be reviewed, activities which seemed to accompany local progress in the Study will be summarized, and a final section will propose recommendations that the findings of this investigation appear to support.

DESCRIPTION OF COOPERATING COLLEGES

Ninety colleges have participated in this Study for periods of time ranging from one to seven years. These colleges are located in sixteen mid-western states, with Iowa contributing the largest number (fifteen institutions), and Colorado and North Dakota the fewest (one each). Eighty-one of the ninety institutions are church related (sixty eight Protestant and thirteen Catholic). Six are private non-church institutions, two state institutions, and one municipal. Seventy-three are co-educational, fifteen are for women, and two for men.

Half of the original twenty-eight institutions were still participating in 1948. All of the ninety except thirteen were accredited by the North Central Association when the Study began; four achieved accreditation during their period of participation. A comparison of the participating and non-participating colleges in the North Central territory indicated that there was no significant difference between

the two groups of colleges in terms of enrollments, tuition charges, and fees charged for room and board.

DEVELOPMENT OF THE STUDY

1940-41 Stage. Preliminary twelve-college survey and ten intercollegiate conferences mentioned above.

1941-43 Stage. The twenty-eight College Study began in 1941. The General Education Board provided necessary funds and the Executive Secretary served as director. This Study was implemented by summer workshops at the University of Minnesota, by local directors and their assisting committees on the campuses, by the coordinator's visits to the campuses, by *News Bulletins*, and by a second series of regional conferences. The local directors and their assisting committees were encouraged to examine the needs of students and to undertake projects which would improve college offerings. The wide choice of projects revealed that any serious effort to improve current teacher-education programs might well involve changes in all phases of the educational programs of these colleges.

1943-45 Stage. When the original two-year Study was ended, this co-operative venture was continued on a self-supporting basis by those colleges most interested. Twenty-six colleges, eighteen of the original twenty-eight and eight new institutions, financed the Study by contributing \$100 each. This self-supporting venture was continued for two years with approximately the same techniques for implementation of the program as were offered to the colleges during the previous period.

1945-48 Stage. As the result of numerous requests from nonparticipating colleges, the Study expanded in 1945. The sponsoring committee invited all independent liberal arts colleges of the North Central territory to join if they

desired. Seventy-four accepted; forty-six joined for the first time, four re-joined, and twenty-four continued. The Executive Secretary continued to direct the Study, each institution contributed \$100 to defray administrative expenses, and three coordinators were added to the program. Two summer workshops were held, one at the University of Minnesota and the other at the University of Chicago. In 1946 a one-week presidents' workshop for the chief executives of the cooperating colleges was added to the program. The techniques for implementing the Study continued to be summer workshops, *News Bulletins*, and visits of coordinators to each campus. The heart of the effort remained in the local projects which were chosen and carried out by the respective college committees.

After 1948. The Study continued after 1948 under the direction of an almost full-time Executive Secretary, Clarence Lee Furrow, of Knox College. The Carnegie Corporation provided a grant of funds for a three-year period and the fee for each college was raised from \$100 to \$150. Six coordinators were appointed and an expanded program of services was undertaken while the previous techniques for implementing the Study were continued.

SERVICES RENDERED THROUGH SUMMER WORKSHOPS

The workshops were planned to help college personnel from participating institutions to improve the effectiveness of their leadership in conducting systematic study and research back home, and to provide general orientation concerning current issues in higher education.

Planning workshop programs. Workshop activities were planned to include general sessions dealing with trends and problems of higher educa-

tion, group interviews to identify special interests, seminars facilitating group study of common problems, consultations with experts on special projects, informal group sessions to canvass current academic practices and opportunities for observation of practices in the two host universities.

Three committees, selected by the participants, helped the staff to plan session activities. A steering committee advised concerning topics for general sessions, the selection of speakers, and the planning of procedures. A social committee planned the recreational activities. A committee on workshop evaluation developed an evaluative instrument, and administered, tabulated, and reported the results.

Facilities provided at the universities. Arrangements were made for group living in order to promote informal association among the participants and staff members. Residence, conference, and consultation rooms were centralized. Lounges and a workshop library were available. Dining facilities varied with the summer and the food services on each campus. The recreational programs and facilities of the universities were readily available. A planned program brought the staff and participants into a stimulating personal relationship.

Problems involved in achieving the workshop goals. Certain difficulties encountered in achieving the goals of the workshop were: (1) selecting effective workshop representatives; (2) selecting them early enough so that they might adequately prepare themselves for the summer's experience; (3) identifying local projects early in the spring to permit cooperative planning by the local study committee and workshop representative; (4) securing expert leadership for all seminars and special interest groups; and (5) providing effectively for those persons who

had attended previous workshops.

In 1941 all workshop representatives were local directors, while in 1948 only 30 percent were directors, the others usually being local committee members. These persons were usually specialists in the various academic disciplines, untrained in educational research, but sincerely interested in local improvement. Occasionally the representative was the person who could most conveniently attend rather than the one best fitted for the task.

Stimulating the college personnel to select definite projects was a recurrent problem. Too frequently these projects were selected following the workshop experiences rather than preceding it. In less than half of the colleges did there seem to be long-range planning of projects for local study and development.

The enlistment of adequate and stimulating leadership for the seminars and special interest groups was a primary concern of the coordinators and the workshop staff. For the most part the leaders were outstanding in their performance though occasionally it took a staff member a considerable time to catch the democratic spirit of the program.

The representatives who because of previous experiences needed an advanced seminar or an opportunity to continue an on-going project presented a special problem. First, it was necessary to provide expert assistance in the workshop to develop the project, and then techniques must be found to help these faculty members carry forward their projects after returning to their campuses.

Results of the workshop programs. The workshop representatives planned and developed projects and instruments to be used locally during the academic year and shared their experiences with

their colleagues during pre-college conferences, faculty meetings, and committee sessions. The most frequently named result of workshop participation was the stimulation of staff members to make institutional studies. Such studies covered all phases of college life.

Most academic specialists who were chosen as workshop representatives needed the workshop discussion of broad college problems and trends before they were ready to participate in local investigation. Nevertheless each representative developed a project or an instrument during the summer session and these usually went into effect back home. However, at least one-sixth of the college respondents failed to report any results of such efforts being successfully completed during the following academic year.

It seems clear that those institutions which identified their problems in advance and sent representatives to the workshops to build instruments or develop plans for these specific purposes were somewhat more satisfied with the program than were those who did not follow this practice. Usually these institutions which profited most gave their representatives an opportunity to report their experiences locally, an opportunity to work on some active study committee, and the support of an interested local staff.

Actually the workshops have been the most important part of the North Central Study program. They have provided a recurrent orientation program for an increasing number of academic specialists interested in educational improvement. And they have stimulated the widespread investigation and revision of academic programs.

REGIONAL CONFERENCES

Seventeen regional conferences were conducted by the Liberal Arts Study

during the period covered by this report.

Purposes. These conferences were planned to serve five major functions: (1) to stimulate re-examination of college programs in the light of student needs; (2) to bring information concerning new trends in education; (3) to contact faculty members who had not been reached by the workshop programs; (4) to stimulate the faculty to undertake new studies or renew those which had been crowded out by demands on faculty time; and (5) to provide faculty members with opportunities to discuss educational objectives, policies, and procedures.

Attendance. These seventeen regional conferences were scheduled at strategic places to afford many college faculties the opportunity for participation. They were attended by a total of 2,487 delegates representing every department of the curriculum.

Organization. A similar pattern of organization was used for all regional conferences, although the details varied. Each program included two general sessions with keynote addresses by outstanding speakers. Two sectional meetings were usually scheduled to deal with special phases of the problem.

Contributions made to study. The college respondents stated that the values of the conferences were extensive though difficult to isolate from contributions made by other aspects of the Study program. Administrators from approximately half of the participating colleges provided opportunities for large delegations to attend. Respondents from these colleges emphasized that the conferences stimulated professional growth of the staff, stimulated interest in local study programs, promoted better subsequent participation in local studies, provided suggestions of methods or techniques for studying local problems, and moti-

vated faculties to challenge local procedures. Apparently, the college personnel who became interested enough in the Study program to invest time, money, and energy profited most from the regional conferences.

MATERIALS OF THE STUDY

The materials prepared and collected by the Executive Secretary and distributed to participating colleges included the *News Bulletins*, the packet materials, and the folders in the Secretary's office.

Purposes. These materials were planned to serve three purposes: (1) to keep the colleges informed concerning the progress of the projects on the different campuses; (2) to assist them in sharing their experiences; and (3) to help each college build a file of resource materials. In the words of a coordinator, "These materials represented the front line attack for the Study."

Description of materials. The *News Bulletin* was published monthly from September through June and contained information concerning the general progress of the Study, a popular section designated "What's Happening on the Campuses," personnelograms concerning participants in the workshops, book reviews of important publications, and other matters of general interest to the colleges. The *Bulletin* also furnished information about forthcoming workshops and the regional conferences. Accompanying the *Bulletin* each month was a packet of materials developed by the colleges and submitted to the Secretary in quantity for distribution to all the colleges. These packets included plans for study projects, progress reports on projects under way, and results of those completed. Occasionally materials obtained from outside sources were added to the packets because of their special interest to liberal arts colleges. These materials

together with many others collected by the Secretary, were classified according to topic and filed in his office. Over two hundred files of current documents on higher education thus became available on loan to any college requesting them, whether a member of the Liberal Arts Study or not.

Uses made of the packet materials by the colleges. From the survey it appears that approximately one-third of the colleges found these materials to be a continuing source of suggestion and information for local investigation. Another third used them to a limited degree and the remaining third scarcely at all.

In some colleges these materials were used as a basis for discussion in committees or general faculty sessions. In a few instances the use was widespread: former workshop participants or local directors enjoyed the stimulation of the news, administrative staffs kept abreast of educational progress, faculty committees gained new insight into instructional problems, and public relations personnel found suggestions in the promotion brochures.

Stimulating the use of these packet materials was an important factor in implementing their local effectiveness. Practices reported by the college committees seemed to stress accessibility rather than actual use. In approximately half of the colleges, local directors routed the materials to interested persons or groups. A third of them displayed the materials in some room easily accessible to the faculty. In still other cases the local chairman assured use of the new items by distributing a list of the packet contents to the staff, making announcements in faculty or committee meetings, or filing the materials in the office of the dean or in the library.

College respondents and coordinators agreed that the effective use of

these materials could be markedly stimulated by a responsible local person who recognized the merit of the materials and introduced them to active local committees.

VISITS BY COORDINATORS

Until 1945 the Executive Secretary served as the sole director for the Study. As the Study grew, more coordinators were added to the program. It was important to find persons for this task who were experienced in workshops, leaders on their own campuses, effective in working with people, available for this part-time assignment, and with a breadth of experience in liberal arts education. Five persons had served in this capacity up to 1948.

Functions of coordinators. The chief function of the coordinators was to help faculties accomplish the purposes of the North Central Study, although the concept of what that implied in the visitation program was not always clearly understood by the participating colleges. The sponsoring committee visualized the coordinator as a stimulating visitor who could help initiate local investigation, give assistance when it became advisable, pass on suggestions based on effective practices in other institutions, and keep the colleges informed concerning trends in higher education.

Some persons in the participating colleges had a somewhat different concept concerning the coordinator's role. They expected pronouncements concerning acceptable practices in order that these criteria could be used as a standard for measuring local attainments. They wanted specific direction for local projects, specialists to diagnose local problems and suggest suitable remedies, and value judgments concerning desirable trends and changes. Occasionally the persons in charge of local programs wanted the

Study explained to the local staffs and administrations, and expected the coordinators to encourage staff members who had not been giving support to the program. This latter function the coordinators could do in some measure but they refused to assay the role of an "educational expert."

Preparation made for visits by colleges. While it was not assumed that there was any one best plan for a visit, it was found that a well planned program was necessary for a successful visit. Those colleges which summarized their current projects in advance, forwarding a copy of the summary to the coordinator, and reviewing the projects with the staff were in general most enthusiastic about the contributions of these visits to their faculties.

Contributions of visits to local Study programs. In appraising these visits, the colleges mentioned the stimulation of faculty interest toward improving the local program as the most important service rendered by the coordinators. Half of the college committees commented on the helpful information acquired concerning experiences and techniques developed in other colleges. A similar percentage reported greater faculty participation in the study program following these visits. A fourth of the college respondents noted that they had received constructive suggestions from the coordinators concerning educational practices, on local projects being studied, assistance in identifying problems for investigation, and improved staff morale.

Criticisms of the visits to the campuses. Many of the criticisms related to the scheduling of the coordinator's visits. Respondents from approximately half of the colleges expressed the opinion that the visits were too brief to properly discuss and analyze the local problems. A lesser criticism related to shortcomings in the performance of the

coordinators, saying that they dealt too much in generalities, failed to grasp adequately the problems involved in the local programs, and failed to furnish enough information concerning effective practices in other colleges. A third criticism related to the failure of the colleges themselves to use the coordinators effectively, saying that the college personnel had failed to have the study projects ready for discussion and had not planned effectively for the use of the coordinator's time.

Suggestions for making visits more effective. Services which the coordinators can give colleges, concerning which both college personnel and coordinators have agreed, include:

- Supply information or make constructive suggestions over a wide range of problems
- Spend some time explaining the program of the North Central Study to the entire local staff
- Make purpose of coordinator's visit clear to all faculty
- Act as a liaison officer keeping college personnel informed as to trends and developments in higher education
- Assist faculties in designing research studies for the local situation
- Express approval of problems on which faculty have worked or point out weaknesses in the situation
- Discuss some of the strengths and weaknesses of the local program with the faculty committee or key faculty member, to help keep program continuing profitably
- Help develop techniques for reaching non-workshop members of the local staff more effectively
- Help college chairmen to develop techniques for sharpening local issues for more effective work
- Interview students concerning effectiveness of college program and report findings to staff
- Offer constructive suggestions regarding techniques for securing regional cooperation
- Spend enough time on each campus to discuss local problems adequately

Even though some dissatisfaction was expressed concerning these visits, no respondent suggested that they be discontinued, and many voiced high praise for the services of the coordinators.

LOCAL STUDIES MADE BY PARTICIPATING COLLEGES

The major purpose of the Liberal Arts Study has been to stimulate faculty members in the cooperating colleges to attempt to solve problems on their own campuses. Its keynote has been cooperative effort at the local and regional levels. From its inception the guiding philosophy of the Study has emphasized self appraisal, with each college identifying its own needs and initiating such changes as it believed would improve the effectiveness of the program.

Of the colleges which provided information for this investigation, about 85 percent reported data concerning their local projects. These college committees listed a total of 239 projects which ranged in length of study time from one month to six years, with over half of the projects completed in one year.

The term "project" as used in this investigation includes many types of faculty endeavor. In some colleges these were extensively organized studies looking toward the solution of some local problem, such as the effort made in one institution to ascertain the kind of citizen the college had graduated over a fifteen-year period. It involved a survey of the current activities, attitudes, and opinions of alumnae. A questionnaire was formulated and distributed to graduates, the returns were statistically summarized and interpreted, and recommendations were made for modifying the curricular and extracurricular program of the college. This project involved most of the faculty and continued through several years.

In another institution, the entire staff in discussion sessions attempted to answer the question, "What are we trying to improve when we improve learning?" The series of discussions

were reported to have modified the teaching techniques of staff members though it did not culminate in formal recommendations. In still another college, a study committee attempted to improve the grading system. It reviewed present practices to determine the actual situation, it polled staff opinion for suggestions concerning desirable changes, and then it formulated a new policy that was later adopted.

Kinds of problems studied. For convenience in presentation, these projects were roughly classified into four groups: curriculum, student personnel services, instruction, and general organization of the college program. Classification of such projects presents many difficulties because of the obvious overlapping among several areas. Some reports concerning investigations in general education included the formulation of objectives and the writing of course syllabi. Some evaluations of college programs included the definition of objectives, development of evaluation instruments, statistical treatment of data, interpretation of findings, and changes in both curricular and extracurricular programs. Consequently, the following classification is somewhat arbitrary and is made largely for convenience of analysis.

Each of the following projects was included in only one area. The greatest proportion of them related to curriculum and student personnel services. Somewhat fewer were reported in the area of instruction; and still fewer were concerned with problems of organization and administration.

Projects in curriculum. Almost half of the projects dealt with the curriculum. The majority of these were concerned with divisional organization, with planning and improving programs of general education, or with the preparation of syllabi for general education

courses in humanities, science, social science, and communications.

A divisional organization of the faculty has been developed in many colleges to facilitate cooperation among persons teaching in related fields, thus counteracting to some degree the specialization developed in many departments. The divisions proved useful in securing effective education and administrative leadership, clarifying objectives, developing general education courses, planning divisional majors, developing more effective methods of instruction, and improving the techniques of evaluation.

Many colleges organized studies focussed upon the clarification of their general education objectives. One committee developed a questionnaire concerning the attainment of college objectives and submitted it to a group of alumni, using the results to help identify weaknesses in curricular offerings, and needed policy changes. Subsequently, the administration and staff endeavored to effect these changes.

Projects in personnel services. Approximately one-fourth of the projects concerned personnel services. Almost half of these were efforts to increase the effectiveness of student counseling. There were efforts to increase the staff's understanding of student needs, to increase faculty participation in the counseling program, to examine feasibility of using students in the programs, to write counselors' manuals, and to centralize the services.

Other projects were focused on the improvement of the testing procedures, attempting to determine the adequacy of current testing programs, to identify the uses made of test scores, to familiarize staffs with testing materials, and the use of test scores in counseling. Still other projects related to the adjustment of students in the college situation. A limited number of investiga-

tions of extracurricular programs attempted to identify the recreational interests and needs of students, to ascertain the amount and kind of participation in such activities, and to integrate programs of curricular and extracurricular activities. Admissions practices, student mortality, student placement, articulation between high schools and colleges, and health services were investigated and improved in some colleges.

Projects in instruction. Approximately one-sixth of the projects dealt with investigations of college instruction. Many of these were concerned with the evaluation of the programs being offered. Almost all of these projects were carried out through the combined efforts of staff, students, and sometimes alumni. The contribution of the alumni, and sometimes that of the students, was to furnish information; the faculty members were involved in planning and directing the studies, tabulating and analyzing the data collected, and interpreting the findings. In some colleges the students assisted in all phases of the program.

Some of these projects were concerned with improving examinations: senior comprehensives, sophomore comprehensives, and course examinations. In some colleges the entire staff participated in the effort with the result that there was improvement in faculty morale, due to the concerted attack upon common problems, as well as improved testing techniques. These efforts resulted in the preparation of examination manuals, increased faculty attention to testing, and longer (and presumably better) tests.

Other projects were efforts to clarify marking practices, to improve class room instruction, and to improve or introduce instructional devices such as remedial reading programs, use of the library, audiovisual aids, style man-

uals for term papers, and reading lists.

One of the most beneficial effects of these instructional studies was an increased interest on the part of the staff in working cooperatively to improve educational offerings. Where the efforts tended to be unsatisfactory, it was because projects consumed much time and effort without producing tangible results; or because recommendations of faculty committees were shelved with nothing substantial done about them.

Projects in organization and administration of college programs. Such projects were concerned with institutional philosophy, codes of ethics, pre-college conferences, faculty handbooks, administrative and financial practices, catalog studies and community services of the colleges. Several committees wrote faculty handbooks to provide accurate information concerning routine procedures for staff and administrative personnel and to assist new staff members in their adjustment to the colleges. Ten of these administrative projects dealt with such problems as salary scales, office space for staff, teaching loads, in-service training programs, and the stimulation of professional reading.

Procedures employed in projects. The procedures used in these local studies may be classified into four categories, using the degree of rigor applied in gathering and interpreting data as the basis for classification. About one-sixth were based upon careful evaluation, aimed at developing an educational program to meet the needs of a particular group. These studies were characterized by the explicit formulation of objectives; preparation of precise instruments for collecting information from students, alumni and staff members; statistical treatment of the data; formulation of recommendations; and suggestions for implementation of these recommendations. These studies were

reported as basic to local improvement.

More than half of the projects involved the collection of local college data and some information from similar institutions as a basis for making recommendations. Respondents reporting these projects submitted less information concerning local improvements than did those with more rigorous studies.

A fifth of the projects were based primarily upon the findings of studies made elsewhere or from suggestions gained from the literature with no apparent attempt to collect local information. Even in these cases some significant improvements were reported.

In a few colleges where participation in study projects was limited to a few individuals such persons collected some information or suggested modifications of statements of policy or objectives. The overall results of their efforts were reported to have been quite limited. It appears that the significance of college studies varies in proportion to the scope and intensity of faculty participation.

IDENTIFYING EFFECTIVE PRACTICES

One of the major purposes of this investigation was to identify the most effective techniques of faculty self-study. Participation in the Study contributed remarkably to the development of some college programs whereas in others there was little change. To get at the differences between them, ten colleges were selected to represent the most successful programs and ten of the least successful. They were selected on the basis of reports from questionnaire respondents and the judgments of coordinators, administrators, and representatives interviewed at the 1948 workshops.

The author recognizes that the persons who helped to identify effective and ineffective programs probably based their judgments on some of the

same factors that are here considered in appraising their practices. Hence, the present findings must be accepted with some reservation. Moreover, since the sample is too small to establish a statistical significance of differences, the present analysis furnishes only first clues. Even so, it is illuminating.

Practices of these two groups

Colleges making satisfactory progress apparently possess the following characteristics to a greater degree than those colleges making less effective progress: (1) understanding of the purposes and program of the Study; (2) interest and participation of many of the staff members in programs; (3) willingness of the faculty to question local procedures; (4) adequate explanation of the program of Study activities to new members of the staff; (5) provisions for keeping the entire staff informed concerning progress of local projects; (6) opportunities for staff members and students to participate in study activities; (7) representation by sizable delegations at regional conferences; (8) allocation of sufficient money to support local investigations; (9) careful selection of workshop representatives by faculty and administrators; (10) selection of a special problem for investigation at the workshop by staff, study committee, and representative; and (11) opportunities for representatives to share and to use their experiences in local study activities.

With respect to four characteristics, there was no distinction between the two groups: namely, the length of time the college had continued in the Study, the type of control, the size, and the fees paid by students.

RECOMMENDATIONS FOR IMPROVEMENT OF THE STUDY

With the findings presented in the previous sections as a background,

the following recommendations are suggested as ways by which the North Central Liberal Arts Study might be further improved.

Recommendations to the Executive Secretary and Central Staff

1. Seek to promote the continuation of the present friendly spirit of cooperation among those sharing in the workshop program.
2. Continue efforts to orient academic specialists with respect to the trends in higher education and the problems facing liberal arts colleges.
3. Prepare a leaflet describing workshop procedure, to be sent to each delegate or given to him upon his arrival, in order to facilitate his orientation in the program.
4. Prepare a Study handbook that would provide information concerning the purposes and programs of this Study and would outline the duties of the executive secretary, coordinators, workshop staff members, and local directors.
5. Provide opportunities for coordinators to attend the workshops each summer and to gain other types of in-service training for their duties.
6. Plan a more appropriate kind of workshop experience for the returning delegates who have specific problems they wish to attack.
7. Plan one of the summer workshops to orient the academic specialists to problems in higher education and the other to provide more specialized training, the field to be changed each summer.
8. Build up a more adequate supply of resource materials for the workshop library.
9. Identify the best techniques of cooperative action and share these with the representatives during workshop sessions, so that they will be more successful in stimulating their colleagues to participate in local activities.
10. Increase the amount of time allotted for the coordinators' visits in order to permit adequate discussion of local problems.
11. Encourage coordinators to keep in contact with their assigned colleges through correspondence following their visits.
12. Find some means by which faculty members in two or more colleges with common problems can work together more closely during the academic year.

Recommendations to the College Personnel

1. Systematically identify local problems for investigation, gather relevant data and

- make recommendations and changes which will improve the educational experiences of the particular student body.
2. Send sizable delegations to regional conferences for professional stimulation and sharing of experience.
 3. Plan definite programs for informing the new staff members and for reminding the others about the purposes and programs of the Study and the plans for local activities.
 4. Appoint some staff member who is acquainted with the packet materials to interest other faculty members in reading and using them.
 5. Reduce the teaching loads of persons closely involved in local studies to provide time for doing the work required to make the projects successful.
 6. Provide clerical help and allocate sufficient funds to make worthwhile investigations possible.
 7. Utilize students in every feasible way in the study activities.
 8. Identify the problems to be investigated at each workshop sufficiently early that local study committees and college representatives may make preparation well in advance.
 9. Notify the executive secretary concerning the problems selected long enough in advance to permit adequate provision for seminars and consultants.
 10. Select as the workshop participant a person who is likely to make progress in solving the problem and who can stimulate and direct faculty effort after returning to the campus.
 11. Select the workshop representative well in advance of the sessions to permit adequate orientation.
 12. Provide opportunities for the workshop representatives to share experiences with their colleagues on campus and to use the information and techniques learned during the summer.
 13. Have the studies in progress summarized from time to time and presented to the faculty with a formulation of major issues and problems for further discussion. See that a copy of these materials is sent to the coordinator in advance of his visit.

WHAT ABOUT THIS TEACHER SHORTAGE?

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WITH THE GREAT demobilization of 1945 now five years in the past, do we continue to suffer a critical shortage of teachers? Has the tremendous publicity given to the teacher shortage of the war period made any significant impact upon the attitude of the public toward the rôle of the teacher in American life? Are we now in possession of objective and factual information that will enable us to construct plans for the future without undue influence by our preconceived judgments? What is being done by way of intelligent counseling of high school seniors and college freshmen and sophomores as they weigh the opportunities in teaching with other vocational possibilities? Is the time at hand for a searching review of the whole problem of supply of and demand for teachers?

The pioneer studies undertaken by the Subcommittee on Teacher Personnel as early as 1939 and, more recently, expanded to the national basis under the sponsorship of the National Commission on Teacher Education and Professional Standards, have shown clearly that there is no longer a general, but rather a highly specialized, shortage of teachers. In other words, the general shortage of 1945 has changed to an actual or threatened oversupply of candidates for certain high school teaching positions while the elementary

school teacher shortage of five years ago has only become more intense. Specifically, the 1950 national report shows that the training programs in all types of higher institutions (teachers colleges, colleges and departments of education, liberal arts colleges, municipal institutions, and, in many states, junior colleges) produced approximately 15,000 four-year trained elementary school teaching candidates in 1941 and that this figure, in nine years, has increased only to 22,000; the 1941 production of potential high school teachers was 40,000 and this figure, in nine years, has increased to 84,000!

It is impossible, of course, to grasp the full meaning of these figures without further facts to fill in the picture. As we review the total enrollments in all types of elementary schools and all types of high schools, we find that, during the past four years, the high school enrollment has actually decreased while the elementary school enrollment has increased approximately 3,000,000 pupils. Table I clearly shows the nature

TABLE I
TOTAL NATIONAL ENROLLMENTS IN ELEMENTARY
AND HIGH SCHOOLS PUBLIC AND PRIVATE*

Year	Elementary School Enrollment	High School Enrollment
1947-1948	20,742,657	6,255,789
1948-1949	21,411,969	6,273,646
1949-1950†	22,641,000	6,185,000
1950-1951†	23,561,000	6,087,000

* Figures as of October 24, 1950, supplied by U. S. Office of Education, Washington, D. C.

† It should be noted that the 1949-1950 and the 1950-1951 reports are estimates by the U. S. Office of Education rather than actual figures.

¹ Mr. Maul, chairman of the Subcommittee on Teacher Personnel of the Commission on Research and Service, is on leave of absence during the 1950-51 academic year from his regular duties at State Teachers College, Emporia, Kansas. He is located at Washington, D. C., and is devoting full time to the program of the Department of Higher Education and the National Commission on Teacher Education and Professional Standards of the NEA.

of the problem in view of the number of enrollees in the elementary schools and in the high schools.

We must note that the current high school enrollment of 6,087,000 is a decrease from 6,255,789 in 1947-1948; in contrast, the current elementary school enrollment of 23,561,000 compares with the 1947-1948 figure of

Students of the problem will readily recall that the elementary school classrooms in many school systems in many localities of every state were overcrowded in the fall of 1947. It was not uncommon to find A.D.A. figures of thirty-five or even more than forty in a classroom. The addition of nearly 3,000,000 elementary school students

TABLE II

TOTAL BIRTHS IN THE NORTH CENTRAL ASSOCIATION STATES, 1943-1950 INCLUSIVE*

Name of State	Total Births in						Provisional 1949	Provisional First 6 Mo. X2† 1950
	1943	1944	1945	1946	1947	1948		
Arizona	14,297	14,225	13,348	16,345	19,153	19,195	20,409	19,568
Arkansas†	42,580	41,560	39,730	45,457	49,152	44,254	47,790	41,990
Colorado	24,367	23,931	23,511	29,518	32,874	33,010	33,271	32,524
Illinois	155,735	142,005	138,705	174,825	196,007	184,871	184,992	172,040
Indiana†	74,672	71,354	68,444	85,515	95,758	92,131	93,949	84,026
Iowa†	47,617	46,564	44,934	56,186	63,858	60,575	63,214	60,206
Kansas	36,021	34,976	33,624	39,751	44,535	42,714	42,514	39,436
Michigan†	125,441	113,586	111,557	138,572	160,275	153,726	156,469	149,568
Minnesota†	58,508	56,113	54,656	67,266	75,577	72,780	72,979	72,052
Missouri†	72,458	67,990	65,691	80,698	89,902	85,096	85,206	81,252
Montana†	11,258	10,765	10,403	12,661	14,770	14,992	15,359	15,438
Nebraska†	25,091	24,694	24,292	27,753	32,018	31,066	31,482	31,500
New Mexico†	15,211	15,585	15,306	18,087	20,322	20,519	21,582	20,784
North Dakota†	13,422	13,530	13,147	15,264	17,064	16,584	16,858	16,460
Ohio†	143,064	132,531	131,910	169,645	197,236	185,799	188,836	189,087
Oklahoma†	47,800	46,885	43,405	50,043	52,691	50,428	49,971	43,854
South Dakota†	12,638	12,442	12,130	14,325	16,398	16,388	17,382	17,344
West Virginia	43,372	41,304	39,039	48,673	55,085	52,396	53,367	47,614
Wisconsin†	64,450	61,547	61,437	74,755	84,050	81,630	82,736	78,844
Wyoming†	5,688	5,612	5,339	5,929	7,157	7,290	7,359	7,118
TOTAL	1,033,699	977,199	950,608	1,171,268	1,323,891	1,265,444	1,285,725	1,220,705
Increase over 1944			-26,591	194,069	346,692	288,245	308,526	243,506

* Figures as of October, 1950, supplied by Public Health Service of the National Office of Vital Statistics, Washington, D. C.

† Based on total of monthly reports January-June inclusive X2.

‡ These states have either corrected or verified the accuracy of figures from the national office.

20,742,657. Nor do these figures tell the full story. The critical nature of the shortage of well-prepared elementary school teachers lies in the fact that these enrollments will continue to increase at an enormous rate during the next few years because of the greatly expanded birth rate since the close of the war.

since September, 1947, without a corresponding expansion in plant facilities has led inexorably to further overcrowding of many classrooms. Today many instances of classes above forty-five can be cited. (It may be parenthetically observed here that nowhere in America, tragically, has an agency, either legal or voluntary, undertaken

TABLE III

AMOUNT OF PREPARATION, IN SEMESTER HOURS, OF ELEMENTARY SCHOOL TEACHERS IN SERVICE IN FOURTEEN STATES

States marked thus (*) show 1948-49 figures; all others show 1949-50 figures. In three states it was not possible to classify teachers in one of the seven columns shown below, but all are classified in three large groups as shown in total. These groups are 120 or more semester hours, 60-119 hours, and less than 60 hours.

[illegible]

* Figures for 1948-49.

* Figures for 1948-49.

† Arkansas report includes 0,110 or 7,093 teachers.
‡ Minnesota report includes 10,103 of 11,468 teachers.

† Minnesota report includes 10,193 of 11,408 teachers.
§ Montana report includes 3,466 of 4,910 teachers.

to establish a standard and to influence class size in the elementary school as has been done so effectively throughout the North Central Association area in the high school.)

Although elementary school enrollments have steadily increased during the past four years, it must be observed that the results of the postwar increased birth rate have not yet been felt. Table II, which presents total births in each of the 20 states of the region from 1943 to 1950 inclusive, shows the particular nature of the task in each state as it prepares to meet (and educationally accommodate?) the oncoming expanded enrollments in the first grade, then in the first and second grades, and so on.

Assuming those children who were born in 1944 entered the first grade in 1950, we note from Table II that the total number to enter the first grade next year decreases from 977,199 to 950,608. In September, 1952, however, there will be a total of 194,069 more potential first graders than in September, 1950. Again, in the fall of 1953 the potential first grade numbers 346,692 more than last September. These twenty-state figures are not meaningful to the citizens of any particular locality, but the particular state figures shown in Table II are cause for sober reflection. If we disregard the influence of mortality or removal from or entry into the state, we begin to see the special nature of each state's problem as it undertakes to give each boy and girl an elementary school education.

The problem is further complicated when we note that, in some of the states, nearly all of the elementary school teachers in service are well qualified, whereas in other states a large percentage of those currently in active service have little or no formal preparation. The nature of the task in

each state, therefore, is not entirely (and perhaps not chiefly) governed by the increasing total enrollments. If *quality* of instruction is of first concern, we then find ourselves confronted with the task of either replacing or upgrading every partially prepared or unprepared teacher now in service.

Unhappily it is not yet possible to delineate the extent of formal preparation of each elementary school teacher in each of the states. In some states the data are only now being assembled. In fourteen of the states, however, we have a clear, quantitative measure of teacher preparation as expressed in semester hours of college credit. These data are shown in Table III.

The above information provides a basis for the evaluation of the publicity given to the teacher shortage during the past several years. Much of it has been sensational; some facts have been given and not a few distorted pictures have been drawn. It seems fair to say, however, that the general public has been no less than aroused and that there is a sincere awakening of interest in the *quality* of the elementary school instructional program, particularly as reflected by the preparation of the teachers and their economic status. Certain it is that the public recognition of elementary school education is now higher than at any previous time. Salaries have increased markedly and, in many instances, equal high school salaries when training and experience are considered; the need for better facilities and much more up-to-date equipment and supplies is being recognized; the school teacher is being freed from the social shackles which formerly restricted participation as a normal citizen; tenure, retirement, and sick leave are being provided; consolidation and transportation are reducing the number of undesirable isolated rural

(Continued on page 394)

NEW TEACHERS' EVALUATION OF INDUCTION TECHNIQUES¹

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THE TECHNIQUES OF INDUCTION

THE PURPOSE of this part of the study is to establish the identity and extent of employment of the techniques utilized in selected school systems to induct newly appointed teachers. Part II of the check-sheet was designed to serve this purpose. The first response desired was to indicate whether or not each of the forty-one techniques being evaluated was actually employed during their induction. It was believed that the results of this check would reflect current practice in the induction of teachers into new teaching situations. The results of the first response are shown in Table XII.

Table XII shows the techniques actually employed in the induction of the 136 teachers studied. These are arranged in descending order according to the percentage of teachers identifying each. In addition, Table XII shows the percentage of teachers indicating the absence of the technique during their induction, the percentage of respondents not checking the item, and the number indicating the relative rank of each technique based on the percentage of teachers checking the item affirmatively.

Table XII shows that the top ranking technique, (6) General faculty meeting to discuss over-all school policies, was employed during the induction of 78 percent of the total group,

while 21 percent indicated that they did not experience the technique during their induction, and 1 percent did not check the item. The rather high percentage of negative responses to this induction technique is significant in that, based on the experience of the total group studied, slightly more than one out of every five inductees did not have the benefit of this commonly employed technique. This is partly explained by the presence of several teachers in the sampling who assumed their position at mid-term rather than at the beginning of the school year when this meeting is customarily held.

Further examination of Table XII reveals that, together with number (6), the top ranking technique, numbers (2), (10), and (8) were accorded the four successive highest ranks in frequency of mention and were employed in the induction of from 57 to 78 percent of the teachers studied. The percent not checking these techniques ranged from 1 to 8. Those techniques employed in the induction of from 40 to 46 percent of the total group were numbers (26), (30a), (3), (28), and (5). The corresponding frequency rank of this latter group ranged from 5 for number (26) to 9 for number (5). It will be observed that, out of the forty-one inductive techniques utilized in this study, only nine were actually employed for more than 40 percent of the group of 136 recent inductees. While it is not to be assumed that all the techniques reported in this study should be or could be employed in any one school system, it would seem that there might be a wider employment of those more commonly used to facilitate the induc-

¹ This is the third, and last, of three reports on the induction of new teachers into service. The first appeared in the *QUARTERLY* for October, 1950, and the second in the issue for January, 1951. As previously explained, the continuity of the original numbering of tables has not been disturbed.

TABLE XII
TECHNIQUES EMPLOYED IN THE RECENT INDUCTION OF 136 TEACHERS

Induction Techniques	Percent of Teachers Reporting Technique Employed			Rank Order
	Yes	No	No Info.	
(6) General faculty meeting to discuss over-all school program.	78	21	1	1
(2) Information in regard to specific teaching and buildings assignment.	75	21	4	2
(10) Making pupil personnel records available to all new teachers.	62	34	4	3
(8) Individual conferences with building principal.	57	35	8	4
(26) Careful attention to assignment in major field of preparation only.	46	46	8	5
(30a) Assisting new teachers in understanding the mechanics of pupil personnel records.	43	41	6	6
(28) Special aid and assistance in getting oriented in the school plant.	43	41	6	6
(3) Special orientation conferences for all new teachers.	43	53	4	8
(1) Assistance in securing adequate housing.	43	55	5	9
(5) Individual conference with elementary or secondary school supervisor.	41	52	7	10
(47) Furnishing teachers with handbooks explaining school policies.	38	60	2	11
(31) Assisting the new teacher in understanding the school's system of evaluating pupil achievement.	38	53	9	12
(24) Frequent follow-up visits by the principal to promote better induction.	37	41	22	13
(30) Assisting new teachers in understanding the mechanics of bookkeeping teaching.	37	58	5	14
(27) Informing new teachers with respect to community problems.	36	61	3	15
(24b) Frequent follow-up visits by the supervisor to promote better induction.	32	58	10	16
(29) Special aid in acquainting new teachers with the school's services.	32	62	6	17
(7) Community receptions sponsored by PTA groups.	32	63	5	18
(9) Supplying new teachers with periodic supervisory bulletins.	31	60	9	19
(11) Informal inter-school socials honoring new teachers.	31	65	4	20
(12) Provisions for group meetings between teachers in same subject.	30	63	7	21
(25) Assistance in establishing good relationships with the non-teaching personnel.	28	52	20	22
(11a) Informal intra-school socials honoring new teachers.	26	69	7	23
(24a) Frequent follow-up visits by superintendent to promote better induction.	22	69	9	24
(15) Provision for intra-school visitation to observe superior teaching	22	74	5	25
(23) Assignment of new teachers with a view to probable adjustment to pupils.	18	72	7	26
(23a) Assignment of new teachers with a view to probable adjustment to personnel.	15	72	13	27
(35) Provision for new teachers to report earlier for orientation purposes.	15	79	6	28
(22) Relieving new teachers of all extra-curricular duties during induction period.	15	80	5	29
(32) Transferring elsewhere in the system if better adjustment is indicated.	13	79	9	30
(18) Assigning new teachers to experienced teachers during the early part of the year.	12	83	5	31
(13) Excursions over the city and surrounding area for orientation purposes.	12	85	4	32
(14) Reducing the teaching load the first semester to promote better induction.	10	85	5	33
(20) Cooperation between schools and community clubs in promoting new teacher's induction into community.	10	86	5	34
(17) System-wide pre-school workshops with emphasis given to induction of new teachers.	10	87	4	35
(21) Cooperation with churches in planning services and receptions for new teachers.	8	85	10	36
(33) Assisting new teachers through college follow-up or internship programs.	7	85	8	37
(19) Provision for a joint administrative-teacher committee to assist new teachers in solving induction problems.	7	88	5	38
(34a) Gradual induction of new teachers through the use of substitute teachers.	7	81	13	39
(16) Provision for small group visitations by new teachers to other systems to observe superior teaching.	7	88	6	40
(34) Gradual induction through the use of the cadet system of teaching.	5	84	11	41

tion of a new appointee into his teaching situation.

This finding; namely, the failure of schools to provide an adequate induction program to facilitate the newly appointed teacher's adjustment to a new teaching situation, is in agreement with the results reported in the National Education Association's Survey of Teacher Personnel Procedures in 1942.¹ In this research, the question was asked, "What procedures are followed, for the school system as a whole, to help new teachers get a satisfactory start?" Thirty-six cities indicated that none of the practices listed by the survey were employed in the school systems.

Table XII shows that those induction techniques which were accorded a frequency of mention placing them in the highest twenty among the forty-one used were employed in the induction of 30 percent or more of the total group. It is believed that these twenty highest frequency ranking inductive techniques represent the prevailing pattern of induction in the school systems of the country, as judged by the group of inductees included in this study. The assumption here is that those techniques ranking lower than twenty in frequency of mention and employed in the induction of less than 30 percent of the total group would exert relatively little influence on the over-all induction pattern among the schools represented. These problems will not be used in the latter part of this section in the development of the most commonly employed and most helpful induction techniques based upon the experience of the teachers studied.

RELATIVE HELPFULNESS OF INDUCTION TECHNIQUES

The 136 recently inducted teachers were asked to indicate the degree of helpfulness received from each tech-

nique on the following scale: (1) not helpful at all, (2) slightly helpful, (3) clearly helpful, and (4) extremely helpful. It was believed that this check would produce a fairly reliable evaluation. The results of this appraisal of the twenty most frequently employed techniques are shown in Table XIII (the percentages are based on first and second choices only).

The significant fact emerges that no technique was indicated by any respondent as having been *not helpful at all*. It will be noted that three techniques, (6), (3), (9), ranking 1, 8, and 19 respectively in relative frequency of mention, were accorded first choices as *slightly helpful* during their recent induction. Three additional techniques, (2), (30a) and (5), ranking 2, 6, and 10 in relative frequency, were accorded second choices in the *slightly helpful* column, and a fourth, number (24), ranking 13 in relative frequency, received an equal choice for the *slightly helpful* and *clearly helpful* column.

In the column headed *clearly helpful*, twelve, or 60 percent, of the techniques were accorded first choice as clearly helpful during the induction of the teachers studied. In addition, seven, or 35 percent, of the techniques were given second choice. Taken together, these two judgments indicate that a large measure of helpfulness from the employment of these techniques was experienced by these inductees.

The results of the tabulation of choices in the *extremely helpful* column reveal that five of the twenty techniques were given first choice by the respondents, and ten were accorded second choice as having been *extremely helpful* in their induction. With the single exception of number (3), ranking 8 in frequency of mention, each of the

¹ "Teacher Personnel Procedures," National Education Association, Research Bulletin, XX, No. 2 (March, 1942).

techniques receiving a second choice in the *extremely helpful* column also was accorded a first choice as being *clearly helpful*. It follows, therefore, that those techniques receiving a first choice as *extremely helpful* plus a second choice as being *clearly helpful* namely, num-

be safely concluded that these techniques, namely, numbers (8), (28), (31), (30), (27), (29), (7), (24b), and (11), rank but slightly less effective than the former group of five.

When the results shown in Table XIII are summarized the following

TABLE XIII
DEGREES OF HELPFULNESS REPORTED BY 136 TEACHERS CONCERNING
VARIOUS TECHNIQUES EMPLOYED IN THEIR INDUCTION

Induction Techniques	Percent Reporting						Rank Based on Freq. of Mention
	Employed Yes No		Degree of Helpfulness*				
			1	2	3	4	
(6) General faculty meeting to discuss over-all school program.	78	21	—	37	30	—	1
(2) Information in regard to specific teaching and building assignment.	75	21	—	31	34	—	2
(10) Making pupil personnel records available to all new teachers.	62	34	—	—	36	43	3
(8) Individual conferences with building principal.	57	35	—	—	43	29	4
(26) Careful attention to assignment in major field of preparation only.	46	46	—	—	35	45	5
(30a) Assisting new teachers in understanding the mechanics of bookkeeping of teaching.	43	51	—	31	36	—	6
(28) Special aid and assistance in getting oriented in the school plant.	42	52	—	—	38	31	7
(3) Special orientation conference for all new teachers.	42	53	—	29	—	28	8
(1) Assistance in securing adequate housing.	42	55	—	—	29	36	9
(5) Individual conference with elementary or secondary school supervisor.	41	52	—	32	43	—	10
(4) Furnishing new teachers with handbooks or guides explaining school policies.	38	60	—	—	29	35	11
(31) Assisting new teachers in understanding school's system of evaluation of pupil achievement.	38	53	—	—	48	23	12
(24) Frequent follow-up visits by principal to promote better induction.	37	41	—	30	30	36	13
(30) Assisting new teachers in understanding the mechanics of bookkeeping of teaching.	37	58	—	—	38	34	14
(27) Informing new teachers with respect to community problems.	36	61	—	—	39	35	15
(24b) Frequent check-up and follow-up visits by supervisor to promote better induction.	32	58	—	—	31	19	16
(29) Special aid in acquainting new teachers with school's services.	32	62	—	—	55	43	17
(7) Community receptions sponsored by the PTA group.	32	63	—	—	41	27	18
(9) Supplying new teachers with periodic supervisory bulletins.	31	60	—	40	36	—	19
(11) Informal inter-school socials honoring new teachers.	31	65	—	—	38	31	20

* Key: 1. Not helpful at all
2. Slightly helpful

3. Clearly helpful
4. Extremely helpful

bers (10), (26), (1), (4), and (24), may be accepted by educational administrators as highly effective induction techniques in planning their induction programs.

In addition to the five techniques identified above as being extremely helpful and highly effective, nine were accorded a first choice under *clearly helpful* and, in addition, a second choice as *extremely helpful*. Therefore, it may

tentative conclusions seem evident, based upon the experienced judgment of the 136 recent inductees included in this study.

1. Techniques (6) and (2), although accorded number 1 and 2 ranking in frequency of mention by the total group as having been employed during their induction, were not judged to be of exceptional helpfulness or benefit.
2. Techniques (10), (26), (1), (4), and (24) were extremely beneficial.

3. Techniques (8), (28), (31), (30), (27), (29), (7), (24b), and (11) were only slightly less useful than the five listed above.
4. In addition to techniques (6) and (2), techniques (30a), (3), (5), and (9) were judged to be of but average or less value.
5. Techniques (9), Supplying new teachers with periodic supervisory bulletins, and (6), General faculty meeting to discuss over-all school program, appear to be the most ineffective techniques evaluated by the group.
6. Technique (26), Careful attention to assignment in major field of preparation only, appears to be the most effective technique evaluated, based upon the percentage identifying it as first choice in the *extremely helpful* column. This technique is closely followed by (10), Making pupil personnel records available to all new teachers.

TIME WHEN INDUCTION TECH-
NIQUES WOULD HAVE BEEN
MOST HELPFUL

Here we are concerned with the most effective timing of the techniques judged to be most helpful to teachers during their induction. The third and fourth parts of the check-sheet were designed to enable the respondent to indicate (1) the time when each technique was employed during his recent induction, based on four possible choices, and (2) the time when each technique would have been most helpful. The four possible choices utilized in both of these identifications were (1) at time of interview, (2) soon after election, (3) on opening day, and (4) early in the year. It is the belief of the investigator that this procedure which utilized actual and recent experience with these techniques, should produce a reliable and effective timing schedule for employment of induction techniques.

Table XIV shows (1) the frequency with which each respondent reported the use of each technique, (2) the time when he was exposed to its use, and (3) his opinion concerning the time when it would have been most helpful in his induction.

Three techniques, (2), (8) and (26),

were mentioned by a substantial percentage of teachers as having been used at the time of the initial employment interview (Column *d*). These three techniques were judged to be most helpful when then used (Column *h*). In this latter connection, technique (2) received the highest frequency of mention. Technique (1), Assistance in securing adequate housing, led all the rest when actually employed *soon after election* (Column *e*), and ran second at the *time of interview* (Column *d*). But for greatest helpfulness, the teachers strongly emphasized both periods (Columns *h* and *i*).

It will be observed, also, that three techniques, namely, (8), (26), and (4), were accorded a significant percentage as second choices for *soon after election* (Column *e*). In the second evaluation, technique (8) received a lesser percentage of mention than in the first judgment, number (26) slightly greater, and number (4) a significantly greater frequency (Column *i*).

As would be expected a much larger number of techniques were identified by the group as having been employed *on opening day*. The reasons for this situation are clear. In induction programs not characterized by adequate planning, organization, and timing, there would be a strong tendency to concentrate the entire program on the opening day of school. Three techniques, namely, (6), (3), and (4) were identified by a significant percentage of the respondents as having been employed at that time (Column *f*). Of these, technique (6), General faculty meeting to discuss over-all school policies, received the greatest frequency, 63 percent; technique (4), Furnishing teachers with handbooks and guides explaining school policies, 50 percent; and technique (3), Special orientation conference for all new teachers, 46 percent.

TABLE XIV

TIME WHEN TWENTY "CLEARLY" AND "EXTREMELY" HELPFUL TECHNIQUES WERE ACTUALLY EMPLOYED IN THE INDUCTION OF 136 NEW TEACHERS AND THE JUDGMENTS OF THESE TEACHERS CONCERNING THE TIME WHEN THESE TECHNIQUES WOULD HAVE BEEN MOST HELPFUL

Induction Techniques	Percent of 136 Teachers Reporting											
	Technique Employed		When Employed*				Would Have Been Most Helpful*					
	Yes	No	1	2	3	4	1	2	3	4		
<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>	<i>i</i>	<i>j</i>	<i>k</i>		
(6) General faculty meeting to discuss over-all school policies.	78	21	0	9	63	21	1	21	48	15		
(2) Information in regard to specific teaching and building assignment.	75	21	32	27	28	6	45	40	3	3		
(10) Making pupil personnel records available to all new teachers.	62	34	2	13	36	44	6	25	29	29		
(8) Individual conferences with building principal.	57	35	27	26	21	26	27	16	8	23		
(26) Careful attention to assignment in major field of preparation only.	46	46	45	21	13	13	44	26	8	11		
(30a) Assisting new teachers in understanding the mechanics of pupil personnel records.	43	51	0	5	25	64	0	22	36	32		
(28) Special aid in getting oriented in the school plant.	42	52	16	21	24	32	10	31	17	27		
(3) Special orientation conference for all new teachers.	42	53	10	12	46	23	19	32	31	10		
(1) Assistance in securing adequate housing.	42	55	34	55	11	18	57	57	0	7		
(5) Individual conferences with elementary or secondary school supervisors.	41	52	25	16	28	44	23	27	9	28		
(4) Furnishing teachers with handbooks and guides explaining school policies.	38	60	6	25	50	17	27	40	25	2		
(31) Assisting new teachers in understanding school's system of evaluating pupil achievement.	38	53	2	10	23	68	6	23	21	49		
(24) Frequent follow-up visits to promote better induction.	37	41	2	4	14	80	2	6	18	70		
(30) Assisting new teachers in understanding the mechanics of book-keeping of teaching.	37	58	0	4	18	70	0	20	24	46		
(27) Informing new teachers with respect to community problems.	36	61	14	3	6	55	12	29	12	37		
(24b) Frequent follow-up visits by supervisor to promote better induction.	32	58	0	2	0	67	0	5	16	56		
(29) Special aid in acquainting new teachers with the school's services.	32	62	9	14	20	55	5	23	32	30		
(7) Community receptions sponsored by the PTA groups.	32	63	2	7	7	75	1	14	11	50		
(9) Supplying new teachers with periodic supervisory bulletins.	31	60	2	14	19	60	10	19	21	62		
(11) Informal inter-school socials honoring new teachers.	31	65	2	5	10	71	2	5	19	48		

* Key: 1. At the time of interview
2. Soon after election

3. On the opening day
4. Early in the year

In addition to the three techniques above, twelve were accorded the next highest frequencies of mention of use under *on opening day* (Column *f*). Of this group, six, namely, (2), (10), (30a), (28), (5), and (31), appear to be fairly significant while the remainder of the group, (24), (30), (29), (7), (9), and (11) appear to be relatively unimportant.

Table XIV shows further that technique (6) was indicated by 63 percent

of the teachers as having been used *on opening day* (Column *e*) but 21 percent said it would have been most useful at that time (Column *i*). A like tendency is observed in the evaluation of technique (3) which decreased from a frequency of 46 percent (Column *f*) to 31 percent (Column *i*) and at the same time increased from 10 percent *at time of interview* (Column *d*) to 19 percent (Column *h*), and from 12 percent *soon after election* (Column *e*) to 32

percent (Column *i*). The third technique accorded a significant mention in the first evaluation, namely, technique (4) decreased from 50 percent (Column *f*) to 25 percent (Column *j*) but increased from 6 percent to 27 percent *at time of interview* and from 25 percent to 40 percent *at soon after election*.

With respect to the six techniques which were referred to above as having received lower frequencies of mention in the first identification, namely, (2), (10), (30a), (28), (5), and (31), four of the group, (2), (10), (28), and (5), received a markedly less significant frequency in the second evaluation, and a fifth, technique (31), received a slightly less significant percentage. One of this group, number (30a), Assisting new teachers in understanding the mechanics of bookkeeping of pupil personnel records, received a significant increase from 25 percent in the first identification (Column *f*) to 36 percent in the second evaluation (Column *j*).

Table XIV shows that, in respect of time employed in induction, thirteen of the twenty techniques ranged from 80 to 32 percent under *early in the year* (Column *g*). It is significant that ten of these thirteen comprised the highest group in the second evaluation. However, nine of this array were given a lower frequency in the second instance and only one, number (9), Supplying new teachers with supervisory bulletins, was given a slightly greater mention (Columns *g* and *k*) whereas three of the techniques, namely, (30a), (28), and (29), declined sharply.

When the two situations are compared, that is, the time when the induction techniques were actually used and the time when the teachers judged they would be most helpful the significant fact emerges that many of the techniques given a substantially high percentage of frequency of actual use

dropped off to a comparatively low frequency of helpfulness for *early in the year*. For example, technique (10), Making pupil personnel records available to all new teachers, received a frequency of 44 percent of use at that time but decreased to 29 percent in regard to helpfulness, a drop of one-third. Technique (30a), Assisting new teachers in understanding the mechanics of pupil personnel records, decreased from 64 percent to 32 percent, a difference of one-half. Similarly, technique (3), Special orientation conference for all new teachers, decreased from 23 percent to 10 percent, a difference of 57 percent. Other techniques that were given a significantly lower evaluation in the second judgment were (1), (5), (4), (30), (27), (20), (7), and (11).

SUMMARY

Table XIV indicates that newly appointed teachers believe that induction techniques would be most helpful if employed at the times shown below.

At time of interview:

1. Definite and specific information in regard to specific teaching and building assignment.
2. An individual conference with the building principal.
3. Assignment to teach in their major fields of preparation only.
4. Assistance in securing adequate housing.

Soon after election:

1. Special assistance in getting oriented in the school plant.
2. A special orientation conference for all new teachers.
3. Additional assistance in securing adequate housing. (The group accorded an identical percentage, 57 percent, to this item for both *at time of interview* and *soon after election*.)
4. Furnishing new teachers with handbooks and guides explaining school policies.

On opening day:

1. General faculty meeting to discuss overall school policies.

2. Making pupil personnel records available to all new teachers.
3. Assistance in understanding the mechanics of bookkeeping of pupil personnel records.
4. Special aid in getting acquainted with the school's special services.

Early in the year:

1. Making pupil personnel records available to all new teachers. (The percentage preferring this assistance *early in the year* was identical to that for *on opening day*, namely, 29 percent.)
2. Individual conferences with elementary or secondary school supervisors.
3. Assistance in understanding the school's system of evaluating pupil achievement.
4. Frequent follow-up visits to promote better induction.
5. Assistance in understanding the mechanics of the bookkeeping of teaching.
6. Informing new teachers with respect to community problems.
7. Community receptions sponsored by the PTA groups.
8. Assistance resulting from being supplied with periodic supervisory bulletins.
9. Informal inter-school socials to facilitate socialization.
10. Frequent follow-up visits by supervisor to promote better induction.

According to the judgment of the teachers included in this study, the above constitutes the most timely and helpful employment schedule of induction techniques designed to facilitate the induction of a teacher into a new teaching situation. Since this evaluation represents the experienced judgments of 136 recently inducted teachers and, further, since these teachers represent a cross-section of the new teachers in a variety of schools of all sizes in different states, both urban and rural, elementary and secondary, the evaluation should be reasonably reliable.

The purpose of this phase of the investigation has been (1) to determine, based upon the experienced judgment of the 136 recently inducted teachers studied, these techniques judged to have been extremely and clearly helpful by the group during their induction,

(2) to determine when these techniques were employed during the process, and (3) at what time during their induction would these techniques have been most helpful. These findings have now been established.

GOALS OF INDUCTION

The philosophy underlying this study precludes the establishment of arbitrary and externally imposed goals. Such goals do not allow for the recognition of the diverse situational factors present in all schools and communities. The goals of an induction program should be established cooperatively by the group concerned. It has been found that when a group sets up its own goals to give direction to its efforts, unusually high interest and motivation are easily maintained. In view of these considerations, the following criteria are suggested to govern the establishment of goals for an induction program:

1. Goals should be both ultimate and immediate.
2. Goals should not be externally imposed but rather evolve out of the multiple situational factors present in the particular school situation.
3. Goals should be cooperatively established by the group concerned.
4. Goals should be of such nature as to enable both the individual and the group to see positive evidence of continuous progress toward their achievement.
5. Goals should possess flexibility and continuity in order to be adaptable to emerging needs and insights.

The induction goals listed in the following paragraphs are suggestive, and are not intended to be adequate or appropriate in any and all school-community situations. It is readily recognized that these goals interfuse and overlap. To synthesize and pull together some of the essential elements of this study, the techniques of induction which were judged by the teachers to have been helpful and which appear to be promising in the achievement of

each suggested goal are listed below.

General or ultimate goals:

1. To assist new teachers to achieve their maximal teaching efficiency in the most expeditious manner possible through the provision of appropriate administrative and supervisory aid and guidance of a personal, professional, and social nature.
2. To establish maximally effective and mutually desirable relationships between the new teacher and the administrative and supervisory staff, the other teaching personnel, and the pupils.
3. To establish the most harmonious relationships between the new teacher and the total school-community environment.
4. To provide all new teachers with essential information and assistance at the time when it will be most beneficial and useful.

Immediate goals, together with appropriate techniques and times of greatest helpfulness:

1. To aid the new teacher in achieving his maximum teaching efficiency through placement in the proper field and at the appropriate level of instruction.

Appropriate Techniques

- (2) Providing information in regard to specific teaching and building assignment—at time of interview or soon after election.
- (26) Careful attention to assignment in major field of preparation only—at time of interview or soon after election.
- (23) Assignment of new teachers with a view to probable adjustment to pupils—soon after election.
- (8) Individual conferences with building principal—at time of interview or soon after election.
- (5) Individual conferences with elementary and secondary school supervisors—early in the school year.
- (10) Making pupil personnel records available to all new teachers—on opening day or early in the year.
- (23a) Assignment of new teachers with a view to probable adjustment to personnel—soon after election.
2. To develop as clear an understanding as possible among new teachers of the school's philosophy, program, and procedures.

Appropriate Techniques

- (4) Furnishing new teachers with handbooks and guides explaining school

policies and procedures—soon after election.

- (3) Special orientation conference for all new teachers—soon after election.
- (8) Individual conference with building principal—at time of interview or soon after election.
- (5) Individual conference with elementary or secondary school supervisor—soon after election.
- (31) Assisting new teachers in understanding the school's system of evaluation of pupil achievement—on opening day and early in the year.
3. To furnish all possible assistance to the new teacher in facilitating the establishment of mutually desirable teacher-community relationships.
 - (1) Assistance in securing adequate housing—at the time of interview or soon after election.
 - (27) Informing new teachers with respect to community problems—soon after election or early in the year.
 - (7) Community receptions sponsored by P. T. A. groups—early in the year.
 - (13) Excursions over the city and surrounding area for orientation purposes—early in the year.
 - (20) Cooperation between schools and community clubs in promoting the new teacher's induction into the community—early in the year.
 - (21) Cooperation with churches in planning services and receptions for new teachers—early in the year.
4. To facilitate the establishment and promote the development of optimum administrator-supervisor-new teacher relationships.

Appropriate Techniques

- (8) Individual conferences with building principal—at time of interview and soon after election.
- (3) Special orientation conference for all new teachers—soon after election or on opening day.
- (5) Individual conference with elementary or secondary school supervisor—early in the year.
- (24) Frequent follow-up visits by principal to promote better induction—early in the year.
- (12) Provision for group meetings between new teachers and experienced teachers in the same subject matter area—early in the year.
- (15) Provision for inter-school visitation to observe superior teaching—early in the year.

- (24b) Frequent follow-up visits by the supervisor to promote better induction—early in the year.
 - (24a) Frequent follow-up visits by the superintendent to promote better induction—early in the year.
 - (23a) Assignment of new teachers with a view to probable adjustment to personnel—soon after election.
 - (18) Assigning new teachers to an experienced teacher during the early part of the year—soon after election.
 - (19) Provision for a joint administrative-teacher committee to assist new teachers in solving induction problems—soon after election.
5. To provide all possible administrative and supervisory assistance to the new teacher in the establishment of maximally effective teacher-pupil relationships.

Appropriate Techniques

- (10) Making pupil personnel records available to all new teachers—on opening day or early in the year.
 - (26) Careful attention to assignment to teach in major field of preparation only.
 - (3) Special orientation conference for all new teachers—soon after election or on opening day.
 - (31) Assisting new teachers in understanding the school's system of evaluating pupil achievement—on opening day and early in the year.
 - (23) Assignment of new teachers with a view to probable adjustment to pupils—soon after election.
 - (14) Reducing the teaching load the first semester to promote better induction—early in the year.
6. To aid the new teachers in the discovery and utilization of the human and material resources of the school community.

Appropriate Techniques

- (13) Excursions over the city or surrounding area for orientation purposes—early in the year.
- (8) Individual conferences with building principal—at the time of interview and early in the year.
- (3) Special orientation conference for all new teachers.
- (5) Individual conferences with elementary or secondary school supervisor—early in the year.
- (24) Frequent follow-up visits by principal to promote better induction—early in the year.
- (35) Provisions for new teachers to report

earlier for orientation purposes—soon after election.

- (20) Cooperation between schools and community clubs in promoting the new teacher's induction into the community—early in the year.
 - (7) Community receptions sponsored by P. T. A. groups—early in the year.
7. To facilitate the new teacher's social, civic, and cultural adjustment to the school-community situation through jointly organized and sponsored activities in which ample opportunities for participating and gaining satisfaction are provided.

Appropriate Techniques

- (1) Assistance in securing adequate housing—at time of interview and soon after election.
 - (27) Informing new teachers with respect to community problems—soon after election and early in the year.
 - (7) Community receptions sponsored by P. T. A. groups—early in the year.
 - (11) Informal inter-school socials honoring new teachers—early in the year.
 - (11a) Informal intra-school socials honoring new teachers—early in the year.
 - (13) Excursions over the city and surrounding area for orientation purposes—early in the year.
 - (20) Cooperation between schools and community clubs in promoting the new teacher's induction into the community—early in the year.
 - (21) Cooperation with churches in planning services and receptions for new teachers—early in the year.
8. To provide ways and means of identifying, clarifying, and resolving the problems involved in the induction of new teachers into new teaching situations.

Appropriate Techniques

- (8) Individual conferences with building principal—at time of interview and early in the year.
- (28) Special aid and assistance in getting oriented in the school plant—soon after election or early in the year.
- (3) Special orientation conference for all new teachers—soon after election or early in the year.
- (4) Furnishing new teachers with handbooks and guides explaining school policies—soon after election.
- (24) Frequent follow-up visits by principal to promote better induction—early in the year.
- (27) Informing new teachers with respect to community problems—early in

the year or soon after election.

- (24b) Frequent follow-up visits by the supervisor to promote better induction—early in the year.
- (19) Provision for a joint administrator-teacher committee to assist new teachers in solving induction problems—early in the year.

CONCLUSIONS OF THE STUDY

1. The major conclusion growing out of the study is the realization that successful induction of a new teacher into school and community is a complex and complicated problem. The intensive and extensive nature of the twenty-five problems reported by more than 50 percent of the teachers studied as being present in their induction is verification of this conclusion. It is evident that problems of such breadth and depth make the effective induction of new teachers an extremely difficult undertaking both for the teacher himself and for school and community. It is clear, also, that successful and satisfying induction of the new teacher into a new teaching situation requires a diversified approach with respect to both planning and implementation. No unitary or narrowly conceived plan or method is adequate.

2. Perhaps the second most important conclusion is that a new teacher experiences serious difficulty in learning and understanding the school's philosophy and objectives, administrative procedures, and methods of evaluating pupil achievement. This suggests the imperative need on the part of the school to clarify its motivating philosophy and its procedures and methods of evaluation. To this end the utilization of manuals and handbooks developed jointly by administrators and teachers and containing definite and specific information concerning school policies is recommended.

3. A third conclusion is that comparatively few school systems provide adequate administrative and supervisory aid for new teachers. In the first

place, the information that out of the forty-one induction techniques appraised by the teachers only four were identified as having been employed during their induction by more than 50 percent of the respondents is evidence that far too little attention is being given to induction. In addition, only nine techniques, including the four above, were identified as having been employed by more than 40 percent of the group. This indicates that schools with well formulated and implemented induction programs are relatively few in number.

4. A fourth conclusion is that teachers themselves believe that the absence of helpful induction is a primary cause of much of the low teacher morale and dissatisfaction that characterize a large part of the teaching profession. The data strongly suggests that this condition accounts for much of the current teacher turnover as well as withdrawals from the profession. Most new teachers feel that their induction could have been made more adequate and satisfying with very little effort or expense to the school. They also are in almost complete agreement that the achievement of their maximum teaching efficiency was seriously impaired by the lack of helpful supervision and the absence of a genuine friendliness and concern on the part of the school and community during their induction. In light of these circumstances, it is obvious why many teachers become dissatisfied with their lot in some school communities and leave at the first opportunity.

5. A fifth conclusion is that those induction techniques that are primarily individual are most effective in helping the new teacher meet the manifold problems of induction. Conversely, those techniques that are primarily of a mass or group type are least effective. This is illustrated by the fact that the teachers consistently gave a

superior rating to those techniques which provided specific information and assistance in individual conferences and follow-up visits. Probably the least helpful techniques, other than the mass or group type, are such as sending out periodic bulletins of a supervisory or directive nature calling attention of new teachers to certain aspects of their situation but lacking the warmth and satisfaction of a personal follow-up visit on the part of the supervisory personnel.

6. A sixth conclusion is that the question of timing is of extreme importance in planning and carrying out an induction program. This study clearly indicates that even though much care and diligence may be employed in assembling information and providing assistance designed to facilitate the new teacher's induction, it does not serve its purpose with maximum effectiveness unless it is made available to the inductee at the time of greatest need and usefulness. Teachers who are contemplating acceptance of a new position desire, at the time of the first interview, specific information regarding satisfactory housing and their teaching and building assignments, and the opportunity to confer with the principal under whom they are to work. Such information would have far less utility value to the new teacher on the day school opens with its multiplicity of problems and details. Likewise, assistance in securing pleasant living accommodations, a special orientation conference for all new teachers, and the provision of handbooks and guides explaining school policies would be more beneficial to the new teacher soon after election than within the early part of the school year. A decided majority of the teachers indicated that they believed the information and assistance afforded them would have been far more helpful if it had been provided earlier.

7. A seventh conclusion is that many new teachers are seriously handicapped by being overloaded while striving to adapt to a new school-community environment. They are assigned too frequently to teach undesirable classes as well as those outside their major fields of preparation. In addition they frequently are made responsible for extra-curricular duties not desired by other teachers. One out of four of the new teachers indicated that he had been assigned during induction to teach retarded classes; approximately one out of three, to teach classes composed of problem children; and two out of every five, to teach out of their major fields. It is difficult to understand why new teachers are not given a lighter or at least not a heavier professional load than other teachers. They are confronted with so many adjustment problems that their energies are taxed to the utmost to meet even a minimum teaching load. Administrators should give them special consideration in assigning teaching duties and extra-curricular and committee responsibilities.

IMPLICATIONS OF THE STUDY

The manifold implications arising from this study involve all phases of school administration, supervision, the pre-service and in-service education of teachers, morale, turnover, mobility, and many other facets of the teacher's living. Obviously, such breadth and scope precludes making a complete listing of such implications. The following summary is believed to include those which are the more important.

1. School administrators must come to recognize that induction is an essential and complementary phase of the selection and placement of teachers. The provision of helpful assistance to the newly appointed teacher during his induction into the school including, of course, his adjustment to pupils,

personnel, and community should be considered a major responsibility by the administrative staff. The successful induction of new teachers should result in the improvement of the teaching in the school, thereby promoting the welfare of youth in the school-community environment.

2. The provision of more effective induction not only tends to prevent the formation of negative attitudes and the crystallization of undesirable habits on the part of new teachers but also serves to promote greater receptivity toward and respect for future supervisory assistance and guidance.

3. School administrators should grasp the opportunity provided by the dissatisfaction of teachers regarding their induction experiences and utilize it as a motivating influence to improve the conditions surrounding the teacher and his work as well as to promote desirable teacher growth. Here is a need recognized by teachers themselves as being an important aspect of their living that can and should be improved.

4. School administrators must re-examine the standards employed in determining the teacher's load. The nature of the teacher's task in today's schools is vastly more complex and demanding than in the past. New teachers, who are adjusting to a new environment, new procedures, new personnel, and new pupils need special consideration with respect to their total professional load.

5. School administrators must come to look upon teachers as being able and eager to identify and appraise the problems which they encounter at the instructional level. Classroom teachers are competent to offer and eager to put to the test suggestions designed to mitigate and resolve their difficulties. Teachers, in recent years, have made important and valuable contributions to curriculum improvement. There is

no reason to doubt that they could do the same for administration.

6. The communities and their leaders must be brought to the full recognition and appreciation of the teacher as a person, as a member of a profession, and as a citizen. Schools cannot serve their true function in a community until such understanding is gained. Likewise, the understanding must be developed that teachers should not be expected to exist in isolation from the on-going life of the community and forced to rely upon themselves for the satisfaction of their personal, professional, socio-civic, and cultural needs. It is understandable that, in communities where certain public attitudes prevail, teachers who are unable to fit into the pattern become dissatisfied and consequently transient. At the same time many of those who remain become stereotyped, losing their individuality, resourcefulness, and adaptability. Such persons are inadequate teachers of boys and girls in a democracy.

7. This study suggests that a major contribution that teacher training institutions can make to the successful induction of new teachers would be to insure that each prospective teacher be provided ample opportunity during his pre-service training to have first-hand experiences in establishing desirable teacher-community relationships. In addition, the training institution together with the placement service and the employing personnel of the schools should accept as their joint obligation the placement of the prospective teacher in a school-community situation suitable to the person's background, talents, and capacity. These services performed cooperatively would promote the establishment of desirable teacher-community relationships as well as make the new teacher's induction into the profession more satisfying and successful.

SUGGESTIONS FOR FURTHER STUDY

As an exploratory study of the opinions of teachers regarding their induction this investigation has suggested many topics and problems for further study. Some of the more important of these are as follows:

1. The relationship between school size and the nature of induction programs.
2. A comparison of the opinions of administrators, supervisors, and recently inducted teachers regarding the problems of induction and ways and means of promoting better adjustment of new teachers.
3. The results of effective induction as measured by improved school and community

relationships and better community regard for teachers.

4. The induction difficulties experienced by beginning teachers and experienced teachers new to a teaching situation.
5. A case study analysis of the effects on teacher morale of well-planned and implemented induction programs.
6. Teacher turnover and mobility as related to the presence or absence of an effective induction program.
7. Differences between the teaching assignments and professional loads of new teachers, both beginning and experienced, and those of other teachers.
8. The influence of institutional placement and follow-up procedures on the teacher's induction into the school-community situation.

WHAT ABOUT THIS TEACHER SHORTAGE?

(Continued from page 380)

locations. The opportunities for a satisfying professional life in teaching have never been so great as they are today, and particularly as conditions and future prospects refer to the elementary school teacher.

We are now in possession of sufficiently clear information based on undisputed facts that future plans no longer need be based on guess work. Educational leaders—professional, legal, and lay—can now jointly construct plans to meet future educational needs in terms of the particular problem existing in each region, each state, and each locality.

Even more to the point, it is now possible to objectify our counseling with young people when we talk about the comparative vocational advantages in different types of work. If high school authorities are in full possession of the now available facts, they can do much to assist in the selection of superior candidates to enter teacher-education programs. In like manner, college advisers working with freshmen and sophomores can approach their respon-

sibilities in a newly-conceived scientific fashion. On every college campus it is now possible to advise college students before they make final vocational choices as to the extent and nature of employment opportunities in every field of teaching service.

Manifestly the time is at hand for all persons interested in the future welfare of our schools to acquaint themselves with facts and to employ these facts in the formulating of future plans. People everywhere are ready and willing to support a more effective educational program; people everywhere are recognizing the complexity of the task in teaching elementary school children; educational leaders everywhere are in possession of facts which not only enable them to counsel with high school seniors and beginning college students but also to plan the kinds of programs which will produce more effective teachers for the elementary schools. The road ahead is wide open. We need only to pursue it with courage.

Know Your
NORTH CENTRAL
ASSOCIATION

Published by the
North Central Association of
Colleges and Secondary Schools

•
April • 1951
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NOTE: The material which follows will be issued as a pocket-size bulletin at an early date. All officials of the Association, state chairmen, and member institutions will receive a supply for free distribution.—THE EDITOR

A WORD TO THE READER

The purpose of this publication is to provide you with the answers to the questions which are most frequently asked about the North Central Association of Colleges and Secondary Schools. The answers, it is believed, will provide a simple yet rather complete picture of the purposes and structure of the Association and how it does its work.

One may be connected with the Association for a long time and yet not wholly understand how it transacts its business. This is possible because it is a rather complex organization. As you will see farther on, it is made up of three Commissions which are largely independent of one another, and of an

Executive Committee which coordinates and articulates the work of the Association as a whole.

If this picture is not wholly clear to everyone that is connected with the Association, it is obvious that others may wonder a great deal about it too. This brief bulletin has consequently been prepared for anyone who, for himself, may have an interest in reliable information about the Association or who may wish to inform others about it. You will find that KNOW YOUR NORTH CENTRAL ASSOCIATION will help to answer questions about that institution wherever they may occur and whatever their origin may be.

Know Your North Central Association

THE ASSOCIATION

What is the North Central Association of Colleges and Secondary Schools?

It is a voluntary, non-incorporated association of secondary schools and higher institutions of learning founded in 1895 and having a mutual interest in the improvement and extension of educational opportunity in the area which it serves.

What are its territorial boundaries?

The Association operates in the nineteen states of the North Central area of the United States—Arizona, Arkansas, Colorado, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, New Mexico, North Dakota, Ohio, Oklahoma, South Dakota, West Virginia, Wisconsin, and Wyoming.

What are its aims and objectives?

(a) The development and maintenance of high standards of excellence in all of its member schools, colleges and universities; (b) the continued improvement of the educational program and of instruction at the levels of secondary and higher education; (c) the encouragement of such improvement through a scientific and professional approach to the solution of educational problems; (d) the encouragement and establishment of cooperative relations between the secondary schools and colleges and universities within its territory; and (e) the maintenance of effective working relationships with other educational organizations and accrediting agencies throughout the United States.

Does the North Central Association have a constitution?

Yes. The constitution is regularly

published in its official organ, the *North Central Association Quarterly*.

Was the Association established by law?

No. It is purely a mutual, cooperative organization.

Does the Association have a permanent central office?

No. The Executive Committee elects a secretary who is the central agent of communication on all matters pertaining to the Association as a whole. Each Commission has its own secretary who handles inquiries peculiar to the responsibilities and functions of the Commission which he represents. In each state the chairman of the State Committee deals with matters of local or state concern.

Where can one find the names and addresses of the persons to whom inquiries should be sent?

The July issue of the NORTH CENTRAL ASSOCIATION QUARTERLY lists the names and addresses of all officers of the Association.

Where can one secure information about all standing and special committees of the Association?

The July issue of the NORTH CENTRAL ASSOCIATION QUARTERLY carries this information. From time to time other issues may list any new committees that have been authorized by the Executive Committee or by any of the Commissions.

How does the Association transact its business?

It transacts all of its business through the Executive Committee, the three Commissions, and the general Association. The last general session of the Annual Meeting of the Association is

the time at which all business is presented to and formally acted upon by the representatives of the member institutions which comprise the Association.

Of whom is the Executive Committee composed?

It is composed of a president and vice president elected annually by the Association; the immediate past president; the chairman and the secretary of each of the three Commissions; four additional members, one of whom is elected by the Association each year for a term of four years; and a secretary and a treasurer appointed by the Executive Committee for terms of office determined by the Executive Committee. Every officer of the Association and of the three Commissions must be officially connected with a secondary school, a college, or a university which holds official membership in the Association, or with the state department of education of a state within the territory of the Association.

Where can the reports of all business transacted by the Commissions and by the Association be found?

In the NORTH CENTRAL ASSOCIATION QUARTERLY.

What is meant by the term "an accredited or approved institution"?

It signifies a school or college that voluntarily meets the criteria of membership as defined by the Association and whose application for membership has been officially approved.

Of how many schools and colleges does the Association consist?

The number varies from year to year. In 1950, 356 colleges and universities and 3,130 secondary schools, or a total of 3,486 institutions were listed.

Is membership in this Association obligatory?

No. Membership is entirely voluntary. Membership does entail, however, the desire and willingness of its members to maintain and abide by its democratically approved criteria for membership.

By whom are these criteria initiated?

All of the criteria for membership are initiated within the Commission on Colleges and Universities and the Commission on Secondary Schools, respectively, whose members are elected by the schools which they represent. In the case of the Commission on Secondary Schools, no major change in regulations or criteria is made except as approved by a majority of *member schools* on referendum. The criteria are finally referred by the Executive Committee to the Association for appropriate action either to approve or disapprove.

Are the decisions of the Association bearing on policy and management of member schools and colleges regulatory or advisory?

They are advisory.

May any educational institution within the territory be excluded from membership in the Association?

Any institution may continue its membership so long as it complies with the criteria and conditions of membership. Any institution which is unable or unwilling to conform to the regulations adopted by the majority vote of the Association may withdraw from membership at any time or may be refused continued membership in the Association.

Are there any schools and colleges in the North Central territory which are not members of the Association?

Yes. Some institutions prefer not to

be members, while others are not able to meet the criteria of membership.

How may a secondary school or college initiate action for membership in the Association?

A secondary school should communicate with the chairman of the State Committee of the state in which it is located, and a college or university with the secretary of the Commission on Colleges and Universities. These officials will supply full information about the procedures to be followed.

Where can the criteria and conditions of membership in the Association be found?

The July issue of the NORTH CENTRAL ASSOCIATION QUARTERLY contains full information. Further inquiries should be addressed to the secretary of the appropriate Commission; in case of the Secondary Commission, however, they may be addressed to the chairman of the State Committee also.

Does a member institution which fails to meet the criteria and conditions of membership receive proper and timely notification before any peremptory action is taken to terminate its membership?

Yes. It is usually warned or advised with respect to any matters bearing on its membership, and given opportunity to rectify them. At all times the Association uses its good offices to assist any member institution to remedy the conditions which might lead to loss of membership.

Does the Association make provision for honorary membership?

No institution as such can hold honorary membership. Individuals, however, may be elected. Recommendations for such membership originate in the Executive Committee and are

submitted to the Association at the time of the Annual Meeting. A favorable vote of two-thirds of the members present is required for election. Honorary members are members of the Association and not of any particular Commission.

Does the Association list member institutions?

Yes. The official list is published annually in the July issue of the NORTH CENTRAL ASSOCIATION QUARTERLY. It includes all schools that meet the requirements for membership.

When and where does the Association hold its Annual Meeting?

The time and place of each Annual Meeting are determined one year in advance by the Executive Committee and announced at the concluding business session of the Association each year. The Annual Meeting is usually held near the end of March or early in April. With a single exception it has always been held in Chicago, Illinois. The announcement of the Annual Meeting is always carried prominently in the NORTH CENTRAL ASSOCIATION QUARTERLY.

Who may attend the Annual Meeting of the Association?

All interested persons are welcome.

What privileges have visitors at the meetings of the Association?

The same privileges as members and official delegates, except the privilege of voting.

Who are the official delegates?

Each approved or accredited institution is entitled to send one voting representative to the Annual Meeting who is recognized as the official delegate of that institution.

What are the advantages of sending official delegates to the Annual Meeting?

Each member institution that sends an accredited representative to the Annual Meeting thereby provides itself with a voice and vote in the affairs of the Association, keeps up to date on all of its transactions, and enjoys the privilege of reporting to all other members any innovations that it is trying out at home.

COMMISSION ON COLLEGES AND UNIVERSITIES

What is the composition of the Commission on Colleges and Universities?

The Commission is composed of forty-eight elected members, thirty of whom represent institutions of higher education and eighteen of whom represent secondary schools. The present membership of the Commission is always listed in the July issue of the NORTH CENTRAL ASSOCIATION QUARTERLY.

Where can the list of colleges and universities accredited by the Association be found?

This list appears annually in the July issue of the NORTH CENTRAL ASSOCIATION QUARTERLY. Copies in pamphlet form may be secured free of charge from the Secretary, Commission on Colleges and Universities.

What publications describe the criteria employed in the accreditation of colleges and universities?

These criteria are set forth in general terms in the "Statement of Policy Relative to the Accrediting of Institutions of Higher Education," which appears annually in the July issue of the NORTH CENTRAL ASSOCIATION QUARTERLY. Copies of this statement in pamphlet form are available free of charge from the secretary of the Com-

mission on Colleges and Universities. A more detailed explication of the criteria is published by the Commission under the title, *Revised Manual of Accrediting* which is priced at \$2.00 a copy.

What are the distinctive features of the procedure for the accreditation of colleges and universities?

(a) An institution is judged in terms of the purposes it seeks to serve. (b) The decision about the accreditation of a college or university is based on the quality of the institution as a whole. Superiority in some characteristics may be regarded as compensating for weaknesses in other respects. An institution is not held to a set of minimum standards, violation of any one of which jeopardizes its accreditation.

Does membership in the Association mean that all administrative units of a college or university, including professional schools, are accredited?

Yes. An institution is accredited in its entirety.

Are there any types of institutions that are not eligible for accreditation?

Yes. (a) Institutions operated for profit. (b) Institutions which do not include among their major functions the provision of general education, as defined in the *Revised Manual of Accrediting*.

How many colleges and universities are accredited by the Association?

In April, 1950, 356 institutions—approximately 50 percent of the collegiate institutions in the territory of the Association.

When a college or university is surveyed for accrediting purposes, what broad areas of the institution are included in the examination?

Purposes and clientele, faculty, cur-

riculum, instruction, library, student personnel service, administration, finance, physical plant, institutional study, and athletics.

How does the Commission on Colleges and Universities secure periodic information about the status of member institutions of higher education?

Through a regular series of biennial studies covering three phases of institutional programs—faculty, finance, and library—in a six-year cycle. The results of these studies are also used as a basis for judging the comparative quality of institutions applying for accreditation.

On what grounds are institutions of higher education dropped from the accredited list?

When the reports filed by a member college or university reveal weaknesses which may be symptomatic of general weakness in the program, a complete survey of the institution is made. If the evidence secured from the survey indicates that an educational program of satisfactory quality is not being maintained, the institution will be removed from the accredited list.

To whom should inquiries about the work of the Commission on Colleges and Universities be addressed?

To the secretary of the Commission.

COMMISSION ON SECONDARY SCHOOLS

What is the composition of the Commission on Secondary Schools?

The Commission is composed of the members of the State Committee of each of the several states comprising the territory of the Association, and eighteen other persons elected by the Commission for a term of three years, one third of the number to be elected

each year. The present membership of the Commission is listed in the July issue of the NORTH CENTRAL ASSOCIATION QUARTERLY.

How is the State Committee constituted?

The State Committee is composed of a member of the faculty of the State University whose assignment is in the field of secondary education, nominated by the president of the University; of the director of secondary education or a member of the staff of that department; and of three administrative heads of secondary schools accredited by the Association, elected by the representatives of the member schools of the state for a three-year term. In the case of states with a membership of more than three hundred schools the number of administrative members of the Committee is five, making a total State Committee of seven. Illinois and Ohio are the only states where the State Committee numbers seven.

How is the State Chairman selected?

The chairman of the State Committee is either the representative of the state university or of the state department of education on the Committee and is elected by the Committee for a term of four years.

Where can the list of secondary schools accredited by the Association be found?

The list appears annually in the July issue of the NORTH CENTRAL ASSOCIATION QUARTERLY.

Where are the criteria for the approval of secondary schools published?

The *Policies, Regulations, and Criteria for the Approval of Secondary Schools* is published annually in the July issue of the NORTH CENTRAL ASSOCIATION QUARTERLY and separately in pamphlet form. Copies of the

Policies, Regulations, and Criteria are sent to the administrator in charge of each member school. Additional copies are obtainable from the secretary of the Commission.

What are the distinctive features of the procedure for the accreditation of secondary schools?

Accrediting is based on observance by member schools of (a) *Regulations* and (b) *Criteria*. Regulations deal with definite and, for the most part, quantitative factors in the school's program. They represent "floors below which there seems to be agreement that schools may not fall" and still be deserving of accrediting by the Association. Observance of the *Regulations* is reported annually to the Commission in a special report form (Form A-1) submitted to the chairman of the State Committee on or before November 15. *Criteria* represent qualitative characteristics of the school program, are more general in form than the *Regulations*, and are designed to stimulate member schools to improve. A special report form (Form A-3) is prepared each year providing for study of one criterion by the entire faculty of the school. This report is not due until June 1 so that the staff may make the study of the designated criterion a special project of study for the school year.

How are Regulations and Criteria applied in the accrediting of schools?

In application of the *Regulations* and *Criteria*, the Commission is governed by a set of *Guiding Principles* and a statement of *Policies*. The full statement of *Guiding Principles* and *Policies* is published annually in the July issue of the NORTH CENTRAL ASSOCIATION QUARTERLY and in pamphlet form together with the *Regulations* and *Criteria*. It may be appro-

priate here to summarize the chief features: that a school is judged upon the basis of the total pattern it presents as an institution of its type; that deficiency in one field may be compensated for by strength in other fields; that a school is judged, in so far as possible in terms of its own philosophy and the purpose which it serves in its own community; and that the *Criteria* of the Commission are instruments for continuous self-evaluation.

What is the period of accrediting of schools?

Secondary schools are approved for an indefinite period. All schools are required, however, to submit annual reports on the basis of which the status of the school as a member of the Association is determined. These reports are submitted to the appropriate State Committee for study and recommendation and then reviewed by special committees at the time of the annual meeting. The Reviewing Committees ordinarily involve participation of three hundred or more administrators of member schools.

What are the grounds on which secondary schools may be dropped from membership in the Association?

Schools may be dropped from membership in the Association for continued violation of the *Regulations* and *Criteria* described above. A school which has been approved continuously for five years, however, may not be dropped without warning, except by a three-fourths vote of the Commission.

Schools are "advised" for minor violations of *Regulations* and *Criteria*. This action carries no penalty, but calls for reporting to the State Committee progress made in removing the deficiency. For more serious violations a school is "warned." In this case, the

deficiency must be removed within a year if the school is to remain a member of the Association, except as this policy may be waived by a three-fourths vote of the Commission.

How many secondary schools are accredited by the Association?

In April, 1950, the membership included 3,131 schools, distributed as follows:

Arizona.....	46
Arkansas.....	89
Colorado.....	102
Illinois.....	489
Indiana.....	170
Iowa.....	171
Kansas.....	210
Michigan.....	246
Minnesota.....	121
Missouri.....	174
Montana*.....	37
Nebraska.....	161
New Mexico.....	45
North Dakota.....	65
Ohio.....	425
Oklahoma.....	134
South Dakota.....	79
West Virginia.....	161
Wisconsin.....	154
Wyoming.....	31
Dependents' Schools.....	21

* At the request of the Montana State Committee, the Association at the meeting of March, 1950, accepted the withdrawal of Montana from membership in the Association, effective July 1, 1950. It was agreed, however, that the secondary schools in that state would be continued in membership through the school year, 1950-51, and the names of these schools would be published in the NORTH CENTRAL ASSOCIATION QUARTERLY for July, 1950.

What are American Dependents' Schools?

Dependents' Schools are secondary schools operated in occupied territory by the armed forces for the children of American civilian and military personnel. Because students in these schools come from American high schools, many of them in North Central territory, and will, for the most part, continue their education in American schools and colleges, representatives

of the armed services are desirous that these schools have accredited status. Five Dependents' Schools in Germany applied for admission and were accepted in 1947. Others applied in successive years. In 1950 the list of accredited Dependents' Schools included seven in Germany, two in Austria, ten in Japan, and one each in Okinawa and the Philippine Islands.

What advantages do secondary schools enjoy as members of the Association?

(a) Graduates of secondary schools accredited by the North Central Association are in an advantageous position in seeking admission to college. Although originally this advantage was an important consideration, it has declined somewhat with the development of accrediting by state universities and state departments of education. (b) Membership in the Association confers on a school the prestige which comes from recognition by the outstanding educational agency in the area. (c) The school is likely to be able to offer its pupils and its community a wider range of services than would be possible without the stimulus of cooperating agencies. (d) As a member of the Association, the school is able to participate in the various projects for the improvement of secondary education undertaken by the Association. (e) Member schools receive the NORTH CENTRAL ASSOCIATION QUARTERLY and other publications of the Association.

What are some of the outstanding activities of the Commission on Secondary Schools?

The Commission carries on much of its program through the work of its various committees. Among recent projects are: a comprehensive study of inter-school contests and studies of library personnel in North Central schools, of summer schools at the

secondary level, and of the General Educational Development Test. In conjunction with the other Commissions, it is participating in a study of high school-college relations, and one exploring the status of junior colleges.

To whom should inquiries about the work of the Commission on Secondary Schools be addressed?

For information bearing on the Commission as a whole, to the secretary of the Commission. For information concerning schools or policies within a particular state, to the chairman of the State Committee. Chairmen of the various State Committees are listed annually in the July issue of the NORTH CENTRAL ASSOCIATION QUARTERLY.

COMMISSION ON RESEARCH AND SERVICE

What is the work of the Commission on Research and Service?

A positive, constructive leadership to improve the quality of education has been one of the most important achievements of the North Central Association. It has been constantly on the alert to identify problems of concern to its members, to study their effect upon educational practice, and to acquaint the schools with possible solutions suggested by those studying the problems. The care with which these studies have been made, the splendid qualifications of those participating in the work, and the careful consideration of the findings by the member schools have been important factors in attaining this recognition.

The Commission on Research and Service, through its various committees, has made many such studies dealing with curriculum problems and the improvement of the instructional program. While the Commission initiates,

plans, and carries forward studies in these fields of educational research and service pertaining to universities, colleges, and secondary schools, it also cooperates with the other Commissions and the Executive Committee in such research, study, and activity as they may request.

Who are members of the Commission on Research and Service?

The Commission is composed of twenty-four members, twelve from member colleges and universities and twelve from member secondary schools. They are elected by the Commission, subject to the approval of the Association, for a period of three years.

How is the Commission organized?

The work of the Commission, which is planned and directed by a Steering Committee, is conducted by three major committees. These committees are the Committee on Experimental Units, the Committee on Teacher Education, and the Committee on Current Educational Problems. Each committee has a number of sub-committees at work on special problems or projects for such periods of time as are necessary to complete the proposed studies.

What important research studies have been made?

Only a few examples can be listed here:

- Inadequacies in the Subject Matter Preparation of Teachers
- Teacher Certification Problems
- Teacher Supply and Demand
- In-Service Education of Teachers
- Developing Intergroup Relations in School and Community Life
- Attacking Reading Problems in Secondary Schools
- Functional Health Teaching
- Unit Studies in American Problems
- Self-Study Survey of Guidance Practices

Better Teaching Through Audio-Visual Materials
 Fundamentals of Mathematics
 The Preparation of Teachers by Colleges of Liberal Arts

Where may reports of these studies be obtained?

In each issue of the NORTH CENTRAL ASSOCIATION QUARTERLY are listed the various publications, together with information about where they may be obtained.

What services other than research are rendered?

Because many valuable research studies fail to make much difference in actual school procedures after their publication, this Commission has spent a great deal of time and effort to bring the result of its studies to the attention of the member institutions of the Association. Some of the other services include the holding of discussion group meetings, the planning of regional meetings, the organization of working groups of schools, and the preparation and publication of unit teaching materials.

Where and when are discussion group meetings held?

They are organized at the time of the Annual Meeting to disseminate information and to plan for follow-up activities. All representatives of the schools are invited to attend such meetings. Announcements of them are found in the printed program of the Annual Meeting.

What types of regional meetings have been held?

Regional meetings in areas at considerable distance from Chicago have frequently been arranged so that many educators unable to travel the greater distance to Chicago may attend them.

Several committees of the Commission have used these meetings very effectively.

How does the Commission organize co-operative working groups?

The 1937 report of the Committee on Subject Matter Preparation of Secondary School Teachers was an important factor in the organization of the Liberal Arts Colleges Study. There are now some seventy-two liberal arts colleges working together cooperatively on systematic self-analysis of educational procedures, with a mutual sharing of results. Regional conferences, summer workshops, monthly news bulletins, packets of materials, and a number of traveling coordinators supported by a foundation grant, are all important elements in putting into actual practice the results of this project. A similar study has been set up for institutions for teacher education.

What types of teaching units have been prepared?

The Committee on Experimental Units believes that there is no better medium for making an immediate effect upon what happens in the classroom than published materials that the classroom teacher can put into the hands of pupils for their use. To put this conviction into practice has been the major work of this committee for a number of years. In cooperation with the Charles E. Merrill Company, ten units have been printed and are available for school use. In the thirteen years during which this committee has been active, more than two hundred thousand copies of the sponsored units have been sold. The royalties from such large sales make this committee practically self-supporting.

How may a member school initiate a research study?

A representative of a member school may suggest a promising field for research to one of the officers of the Commission, who will present it to the Steering Committee for consideration. If the proposed problem seems to be of value to a considerable number of other schools, a request will be made of the Executive Committee for permission to make the study and for a budget allotment to underwrite the necessary expenses.

Where may one obtain a list of the officers and committee chairmen?

A list of the officers of the Commission, together with the names of the various active committees, is published each year in the July issue of the NORTH CENTRAL ASSOCIATION QUARTERLY. Inquiries concerning the work of a particular committee should be addressed directly to the chairman as listed in the NORTH CENTRAL ASSOCIATION QUARTERLY.

To whom should inquiries about the work of the Commission on Research and Service be addressed?

To the secretary of the Commission.

THE ADMINISTRATION OF FINANCES

From what sources does the Association derive its financial support?

The Association derives its financial support from membership fees, sales of the NORTH CENTRAL ASSOCIATION QUARTERLY and other publications, and foundation grants. Its chief source of revenue is membership fees. Publications are sold to member schools at cost.

What are current annual membership fees?

For secondary schools, \$10.00; for

junior colleges, \$37.50; for colleges and universities, \$75.00.

To whom should membership fees be paid?

They should be paid to the treasurer of the Association who is the custodian of all funds.

Who determines the amount of annual fees to be paid by member schools?

The Commission on Colleges and Universities initiates policies with regard to fees to be paid by higher institutions, and the Commission on Secondary Schools exercises a like authority in regard to its member schools. Before any change in annual fees may be made, however, such action on the part of a Commission must receive the approval of the Executive Committee and of the General Association at its Annual Meeting.

When are membership fees payable?

They should be paid on or before November 1 of each fiscal year.

What salaries do officers of the Association receive?

No official of the Association receives a salary of any sort; all services are gratuitous. However, certain clerical help is provided officials at the expense of the Association.

Does the Association operate under a budgetary plan?

A detailed budget is organized and approved by the Executive Committee in June of each year. Expenditures in excess of budgetary allotments are not permitted except in case of emergency, and then only with the approval of the Executive Committee.

What is the fiscal year?

The fiscal year of the Association extends from July 1 to June 30.

How is the treasurer appointed?

He is elected by the Executive Committee of the Association.

Is the treasurer bonded?

He is bonded in the sum of \$10,000.

Are the books of the treasurer audited?

They are audited twice annually by certified public accountants, and prior to the Annual Meeting of the Association by a Committee appointed by the president with the approval of the Executive Committee. A complete report of the auditor is published annually in the January issue of the NORTH CENTRAL ASSOCIATION QUARTERLY.

To whom should all inquiries about dues and other fiscal matters be addressed?

To the treasurer of the Association.

THE NORTH CENTRAL
ASSOCIATION
QUARTERLY

What is the function of the QUARTERLY?

It is the official organ of the Association. It contains such materials as the proceedings of the Annual Meeting, the roster of all officers, the list of all committees, the criteria of membership, lists of member secondary schools and higher educational institutions, higher educational institutions accredited outside North Central territory, research reports, addresses delivered on various occasions sponsored by the Association or by any of its Commissions, and so on through quite an array of matters pertinent to the work of the Association and of its members. The professional standing of the North Central Association is such that a cumulative file of the QUARTERLY clearly indicates trends in educational leadership and achievement in the country at large.

Who sets the policies of the QUARTERLY?

There is an Editorial Board of seven members: the secretaries of the three Commissions; the president, the secretary, and the treasurer of the Association; and the editor, who is the chairman of the Board.

How often is the QUARTERLY published?

As its name indicates, it appears four times a year: in July, October, January, and April.

In what issue may information about accredited schools and the official personnel of the Association be found?

The July issue is wholly devoted to matters of this sort. Listed there are the general officers, members of the three Commissions, state committees, special committees, and the like. The rosters of accredited high schools, colleges, and universities appear there, as well as the higher educational institutions accredited outside the North Central area.

Does the QUARTERLY publish materials which do not originate in the activities of the Association?

Generally speaking, it does not. The Editorial Board has established the policy that, since the QUARTERLY is the house organ of the Association, it be devoted almost exclusively to the affairs of the Association.

Who is eligible to receive the QUARTERLY?

All members of the three Commissions and all institutions accredited by the Association receive the QUARTERLY without charge.

What are the regular subscription rates?

Anyone not identified with the Association may subscribe for the QUARTERLY at the regular price. Currently this is \$3.00 a year. The July number which carries complete official rosters

and directories and the like is priced at \$1.25; the others, at 75 cents each.

Are there special subscription rates?

Yes. A special price of \$2.50 is permitted to high school libraries, college libraries, and public libraries and the individuals connected with institutions which are members of the Association.

Is the QUARTERLY the only publication of the Association?

No. The Association publishes many

helpful materials and distributes them widely. Each issue of the QUARTERLY carries the complete list and where they may be secured.

How is the editor of the QUARTERLY selected?

He is elected by the Executive Committee of the Association.

To whom should correspondence respecting the QUARTERLY be addressed?

To the editor.

STATISTICAL INFORMATION CONCERNING SECONDARY SCHOOLS ACCREDITED BY THE ASSOCIATION FOR 1949-50

EDGAR G. JOHNSTON

Secretary of the Commission on Secondary Schools, Wayne University, Detroit, Michigan

THE FOLLOWING tables present significant data compiled from the statistical summaries of annual report forms submitted by member schools for the school year 1949-50. In the current report, data are summarized separately for schools falling into four categories with respect to size, and for the total group of schools. Through an understanding with the Editorial Board of the NORTH CENTRAL ASSOCIATION QUARTERLY, it has been agreed that the complete report of the statistical information for member secondary schools will be published once in five years and that, in the intervening years, only summary tables presenting the more important items for the total group of schools will be submitted. Comparable data for earlier years will be found in the various issues of the QUARTERLY or prior to 1926 in the annual *Proceedings* of the Association.

In the current report, the figures for the preceding five years are given at the bottom of the table, for purposes of comparison. In some cases it was not possible to provide comparable totals for the earlier years because of differences in the method of reporting. The number of boys and girls, for example, were not reported separately by grades prior to 1948. In the earlier years salaries were reported on a range from "less than \$1,000" to "\$3,000 or more." With the upgrading of teachers' salaries, this distribution proved relatively meaningless. (In 1948 only eleven teachers in public schools were reported in the lowest interval and more than two-thirds of the total group fell

in the interval "\$3,000 or over.") For the past two years, the range of salary distribution has been from "under \$2,000 to \$5,000 or over." The totals of the various items for 1950 were not available for the several classes of school according to size. Consequently, the 1950 figures appear only in Table V which presents data for the total group of schools.

The present report presents data only for Form A1, "Report on Regulations." The secretary had hoped that it might be possible to present in this Quinquennial Report some of the findings from the series of Special Reports (Form A3) which the Commission adopted in 1948. Staff to make the necessary analyses has not been available either in the offices of the several State Chairmen or in that of the Secretary of the Commission. In the judgment of the secretary, it would be desirable for the Commission to make provision for publication of the major findings from the series of Special Reports in the next Quinquennial Report which should appear in 1955-56. The last of the six Special Reports projected in connection with the adoption of the revised *Policies, Regulations, and Criteria* will have been submitted to State Chairmen by June 1, 1954. It would seem appropriate for the Commission to explore the possibility of securing the special research assistance necessary to carry through a comprehensive study of the six Special Reports for the entire Association.

In the following tables certain continuing trends may be noted. The com-

ments and interpretations presented here are directed, for the most part, to Table V which presents the picture for all schools. The other tables are not discussed separately, but, where pertinent, differences among the different categories are pointed out.

The membership of secondary schools in the Association has continued a gradual increase to the total of 3,074, having passed the three thousand mark between 1942 and 1944. (Statistics for 1943 are not available, since returns for that year were not received from one state.) It is interesting to note that the number of schools with enrollments under two hundred has been dropping consistently each year. In 1945 these schools comprised more than a third of the total secondary school membership in the Association. The number of schools with enrollments over one thousand shows a reduction, also, but in a lesser degree. The average size of a North Central school is 478.7, a slight increase over the figure for 1949 but lower than those of the three preceding years. The average size of the very large school has dropped more than one hundred in two years. Only in the class of schools with enrollments from 200 to 499 is there an increase in both number and average size. It is probable that this trend reflects the reorganization of school districts into larger units and that we may look for further development along this line. That the situation varies from state to state is evident when we see that the average size of school ranges from 213 to 706.

The total enrollment in North Central schools shows a slight upward swing but is still below that of the immediate postwar years and definitely below the peak of 1,654,831 reported for 1940. The fact that the

numbers enrolled in the eleventh and twelfth grades is *lower* than that of last year while all other grades show an increase should serve to stimulate teaching staffs to study their curricular offerings in the light of the needs of pupils enrolled. The "Special Study of Pupil Population and School Community" carried out in 1949 will provide a good starting point for such a study at the local level. Are our programs still tailored to the needs of a college-bound minority?

The number of graduates in 1949 was lower than that in 1948 or 1947 but higher than for any preceding year. Apparently there is a strong tendency for pupils to remain to graduation *if* they survive the tenth grade!

Certain items in the 1950 report represent changes in the *Policies, Regulations, and Criteria*; for these comparable figures for earlier years are not available. The figures on pupil load are presented in terms of the numbers of pupils graduated in less than the normal period. Other items deal with the adequacy of clerical and of custodial help. On the whole, janitorial service appears to be adequate. One school out of ten reports inadequate clerical help. As was perhaps to be expected, this problem is aggravated in the smaller schools.

Schools appear to be moving slowly in the direction of meeting the regulation dealing with preparation of librarians, which becomes effective in 1955-56. There is a slight increase in the number of full-time librarians reported and a definite improvement in preparation of librarians. There is, however, a marked difference from state to state in the extent to which schools are approaching observance of the regulation. There is a slight increase in per pupil expenditure for library materials, but

this may represent merely keeping pace with price levels of books and periodicals.

Space limitations preclude discussion of the statistics on pupil teacher ratio, staff changes, preparation of new staff members, and salaries. Since these data are presented in some detail, it will be possible for interested individuals or State Committees to compare their own situations with those throughout the Association and with other schools of similar size.

In closing this report, it may be pertinent to make some comparisons showing changes in member secondary schools over the past thirty years as reported in the annual *Proceedings* of the Association for 1920 and in the *QUARTERLY* for June, 1930 and for April, 1941. The number of secondary schools accredited in 1920 was 1,352 from eighteen states. (Arkansas and West Virginia were admitted to the Association subsequently.) By 1930 the number of schools had increased to 2,226 and by 1940 to 2,854. Enrollment data are not included in the 1920 report. In 1930, 1,005,637 pupils were enrolled in secondary schools of the Association with an average school size of 452. By 1940 the enrollment had reached 1,654,831 with an average school size of 580. The number of graduates reported in 1930 was 166,822, a figure almost doubled in 1940 (325,493) and not achieved ten years later.

There has been a distinct advance in teacher preparation. Preparation is not reported in 1920 but data from a comprehensive study made in 1917 are reported in the *Proceedings* for 1919. Of a total of 18,179 teachers two-thirds are listed as "academic" and one-third "vocational." Of the academic teachers 5 per cent of the "new" and 10 per cent of the "old"

are without college degrees. Of the six thousand vocational teachers only 40 per cent have college degrees. By 1930 the number of teachers has increased to more than forty-six thousand. Data on preparation are given only for "new" teachers. Only 1.2 per cent of the "academic" and 30 per cent of the vocational teachers are without degrees. By 1940 the distinction between "academic" and "vocational" teachers had, happily, disappeared. Of the total group of 9,265 new teachers only 2.4 per cent are without college degrees. For 1950 the number of new teachers has increased to 12,612 and the percentage without degrees is just under 2.4. While undoubtedly the fact that one of every fifty new teachers employed in North Central schools in 1950 lacked a bachelor's degree is occasion for serious concern, the change over a period of thirty years reflects a healthy growth in the demand for qualified personnel.

Teachers' salaries are not included in the 1920 report. In 1930 the average salary for men was \$1,878 and for women, \$1,604. In 1940 average salaries had *dropped* to \$1,596 for men and \$1,435 for women. For 1950 the comparable figures are \$3,560 and \$3,174.

A final detail which throws some light on the growth of the Association and the scope of its activities is to be found in a comparison of the budgets for 1920 and 1950. The treasurer's report for the earlier year shows a total of \$6,925.20 in receipts and \$4,372.00 in disbursements. From the minutes of the business meeting we find that "It was further voted that during the coming year no commission shall spend more than \$400, and that the total appropriation to commissions shall not exceed \$1,000."

That the resources of the Associa-

tion and the scope of its activities have been greatly expanded in the intervening decades is evident in the budget adopted on July 1, 1950. The budget comprises estimated receipts of \$63,400 and expenditures covering a wide range of special studies and functioning com-

mittees within the three commissions or sponsored by the Association as a whole. A cursory survey of a year's issue of the *QUARTERLY* reveals the scope and significance of the current professional program of the Association.

TABLE I.—SUMMARY OF THE 1940-50 ANNUAL REPORTS OF SECONDARY SCHOOLS ENROLLING LESS THAN 200 PUPILS

States	Number of Schools			School Organization				Enrollments in Grade 7 through Post-Graduate Work											
				Years Included				Grade 7			Grade 8			Grade 9			Grade 10		
	Public	Private	Total	Six	Four	Three	Other	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1. Arizona	15	0	15	1	13	0	1	12	6	18	32	36	68	269	323	592	249	247	496
2. Arkansas	12	3	15	8	6	1	0	117	134	251	118	98	216	192	196	388	198	257	455
3. Colorado	41	3	44	12	28	2	2	193	169	362	205	194	399	746	769	1,515	690	733	1,423
4. Illinois	135	23	158	6	148	3	1	71	69	140	93	76	169	2,549	2,810	5,359	2,390	2,822	5,212
5. Indiana	19	5	24	12	11	0	1	141	149	290	169	165	334	406	392	798	371	375	746
6. Iowa	52	8	60	2	40	5	13	27	31	58	43	37	80	862	1,123	1,985	957	1,210	2,167
7. Kansas	109	11	120	18	98	4	0	188	185	373	175	175	350	1,871	1,870	3,741	1,792	2,053	3,845
8. Michigan	20	10	30	5	21	1	3	65	78	143	114	120	234	456	670	1,126	446	626	1,072
9. Minnesota	18	13	31	1	10	20	0	14	15	29	0	0	0	53	254	307	335	787	1,122
10. Missouri	26	18	44	5	38	1	0	54	55	109	61	57	118	707	934	1,641	592	835	1,427
11. Montana	17	3	20	0	20	0	0	0	0	0	0	0	0	431	415	846	364	377	741
12. Nebraska	85	11	96	6	88	2	0	47	48	95	50	54	104	1,526	1,572	3,098	1,593	1,599	3,192
13. New Mexico	8	1	9	7	2	0	0	117	110	227	104	92	196	141	146	287	114	144	258
14. North Dakota	40	1	41	6	34	1	0	49	55	104	51	73	124	693	762	1,455	586	601	1,277
15. Ohio	66	11	77	50	21	3	3	777	719	1,496	757	605	1,452	1,100	1,236	2,336	1,099	1,255	2,354
16. Oklahoma	51	4	55	4	32	18	1	24	42	66	35	29	64	662	717	1,379	1,007	997	1,994
17. South Dakota	48	1	49	0	49	0	0	0	0	0	0	0	0	779	849	1,628	731	869	1,540
18. West Virginia	15	1	16	12	4	0	0	214	181	395	165	164	329	326	274	600	244	223	467
19. Wisconsin	9	8	17	2	11	2	2	23	18	41	49	33	82	277	281	558	289	257	546
20. Wyoming	8	1	9	5	4	0	0	69	64	133	60	60	120	138	136	274	142	128	270
Dep. Schools	12	0	12	6	6	0	0	42	40	82	48	39	87	114	107	221	85	69	154
Totals: 1950	866	136	942	188	664	63	27	2,244	2,168	4,412	2,329	2,197	4,526	14,298	15,836	30,134	14,274	16,394	30,668
Totals: 1948	827	127	954					2,169	2,105	4,274	2,086	2,215	4,301	14,152	15,857	30,009	14,667	16,571	31,238
Totals: 1947	862	142	944							4,452			4,108			39,364			31,284
Totals: 1946	856	135	991							4,522			4,658			32,828			29,355
Totals: 1945	883	151	1,034							4,247			4,353			33,901			33,579

TABLE I—(Continued)

States	Enrollments in Grade 7 through Post-Graduate Work—(Continued)										Number of Graduates in 1949	
	Grade 11			Grade 12			Post-Graduate			Total Enrollment		Average per School
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	
1. Arizona	212	196	408	190	167	357	3	0	3	967	975	129.47
2. Arkansas	187	223	410	148	196	344	3	8	11	963	1,112	138
3. Colorado	624	674	1,298	560	571	1,131	5	5	10	3,023	3,115	139.5
4. Illinois	2,114	2,558	4,672	2,042	2,423	4,465	9	39	48	9,268	10,797	126.99
5. Indiana	343	331	674	323	311	634	0	2	2	1,753	1,725	145
6. Iowa	936	1,181	2,117	908	1,153	2,061	1	2	3	3,734	4,737	141.18
7. Kansas	1,581	1,741	3,322	1,632	1,661	3,293	7	14	21	7,246	7,699	124.54
8. Michigan	427	584	1,011	347	577	924	2	6	8	1,857	2,661	150.6
9. Minnesota	464	735	1,199	440	733	1,173	2	1	3	1,308	2,525	123
10. Missouri	619	778	1,397	552	739	1,291	2	4	6	2,587	3,462	136.11
11. Montana	322	345	667	293	280	573	1	2	3	1,411	1,419	141.50
12. Nebraska	1,330	1,521	2,851	1,374	1,448	2,822	19	17	36	5,939	6,259	127
13. New Mexico	76	99	175	71	97	168	0	2	2	623	690	145.8
14. North Dakota	527	630	1,157	492	497	989	2	3	5	2,400	2,711	127.1
15. Ohio	903	1,116	2,019	972	1,101	2,073	1	10	11	5,609	6,132	152
16. Oklahoma	933	911	1,844	857	817	1,674	2	1	3	3,520	3,574	127.9
17. South Dakota	607	688	1,295	621	708	1,329	0	3	3	2,738	3,037	118
18. West Virginia	214	177	391	193	162	355	5	5	10	1,361	1,186	139.19
19. Wisconsin	283	289	572	267	307	574	4	2	6	1,192	1,187	139
20. Wyoming	122	103	225	107	96	203	8	5	13	646	592	137.6
Dep. School	84	72	156	72	72	144	5	7	12	450	406	71
Totals: 1950	12,908	14,952	27,860	12,461	14,116	26,577	81	138	219	58,595	65,901	132.1
Totals: 1948	13,524	15,993	29,517	12,541	15,993	28,534	129	138	257	59,268	67,753	143.15
Totals: 1947			29,046			27,031			442			134.20
Totals: 1946			29,355			25,809			373			131.80
Totals: 1945			30,400			26,963			301			134.00

TABLE I—(Continued)

States	Pupils Graduating in Less Than		Length of Year in Days Taught in 1949-50										Schools Reporting Inadequate Clerical Help		Schools Reporting Inadequate Custodial Service	
	4 yrs. in 4-yr. H.S.	3 yrs. in 3-yr. H.S.	Less than 170	170 to 171	171 to 172	172 to 173	173 to 174	174 to 175	175 to 176	176 to 177	177 to 178	178 to 179	179 to 180 or more	No.	Percent	No.
1. Arizona	2	0	0	0	5	5	6	6	4	0	0	0	1	6.66	2	13.33
2. Arkansas	8	1	0	0	3	4	4	8	0	0	0	0	0	0	0	0
3. Colorado	4	1	0	0	13	11	4	4	5	5	11	11	3	6.8	0	0
4. Illinois	15	0	0	0	4	8	30	46	70	70	70	70	11	7	1	.6
5. Indiana	1	0	0	0	0	0	0	0	0	0	0	0	4	17	0	0
6. Iowa	0	0	0	0	2	6	6	10	9	9	33	33	2	3.33	0	0
7. Kansas	15	3	0	0	45	36	22	4	13	13	17	17	30	25	0	0
8. Michigan	3	0	1	2	5	2	3	0	17	17	17	17	7	23.3	1	3.3
9. Minnesota	3	1	2	5	9	2	1	5	7	7	9	9	3	9.67	1	3.2
10. Missouri	5	0	0	0	5	8	13	9	9	9	9	9	7	15.8	1	2.3
11. Montana	2	0	0	0	0	4	6	1	9	9	9	9	2	10	2	10
12. Nebraska	11	0	2	1	9	15	26	15	28	28	28	28	28	.29	3	.03
13. New Mexico	0	0	0	0	4	1	2	0	2	2	2	2	0	0	0	0
14. North Dakota	6	1	0	0	10	12	15	1	3	3	12	12	19	46.3	0	0
15. Ohio	1	0	0	0	10	27	25	3	12	12	12	12	3	16.9	1	1.3
16. Oklahoma	7	7	0	0	0	6	3	1	45	45	45	45	0	0	0	0
17. South Dakota	4	0	0	2	8	12	17	7	3	3	3	3	7	.14	1	.02
18. West Virginia	3	0	0	0	3	10	2	0	1	1	1	1	3	18.75	1	6.25
19. Wisconsin	0	0	0	0	4	2	7	1	3	3	3	3	0	0	0	0
20. Wyoming	1	0	0	0	3	4	0	1	1	1	1	1	0	0	0	0
Dep. Schools	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
Totals: 1950	92	14	14	10	145	176	198	108	267	267	267	267	130	13.8	14	1.5
Totals: 1948			48	18	132	240	277	106	133	133	133	133				

TABLE I—(Continued)

States	School Library													
	Librarians		Preparation of Librarians. Hours in Library Science					Per Pupil Expenditure						
	Full Time	Part Time	None	1-5	6-15	16-23	24 or more	Less than \$0.50	\$0.50 to 0.99	\$1.00 to 1.49	\$1.50 to 1.99	\$2.00 to 2.49	\$2.50 to 2.99	\$3.00 or more
1. Arizona	2	13	4	1	9	1	0	0	0	1	2	4	2	6
2. Arkansas	6	12	5	2	5	1	5	0	0	1	6	1	0	7
3. Colorado	4	47	28	9	12	1	1	0	0	10	5	11	6	12
4. Illinois	22	157	44	45	59	8	23	0	0	7	22	32	32	64
5. Indiana	1	24	2	3	4	8	8	0	0	3	6	1	4	10
6. Iowa	7	73	52	11	13	2	2	3	4	13	11	6	8	14
7. Kansas	21	133	64	34	40	7	9	1	2	13	21	20	23	40
8. Michigan	8	35	13	15	6	1	8	0	5	1	7	4	0	13
9. Minnesota	12	21	2	1	19	0	10	0	1	6	2	4	4	14
10. Missouri	14	53	28	10	16	3	10	0	1	3	8	10	4	17
11. Montana	1	20	4	6	6	2	3	0	0	2	3	8	0	7
12. Nebraska	11	88	36	39	8	5	10	0	8	13	27	25	5	16
13. New Mexico	0	9	2	5	1	1	0	0	0	1	3	3	1	1
14. North Dakota	2	45	19	9	17	1	1	1	4	12	12	5	3	4
15. Ohio	7	76	43	14	14	4	8	0	3	13	19	18	11	13
16. Oklahoma	9	49	11	15	21	5	3	1	2	10	7	13	3	17
17. South Dakota	0	59	15	18	17	0	0	1	0	7	13	12	4	12
18. West Virginia	2	17	7	2	8	1	1	0	2	7	3	0	0	4
19. Wisconsin	2	18	1	1	12	1	15	1	6	5	6	5	0	3
20. Wyoming	0	9	3	2	3	0	1	9	0	1	1	1	2	4
Dep. Schools	7	9	1	0	7	0	5	0	0	0	0	0	0	12
Totals: 1950	138	967	384	242	297	52	123	17	38	129	184	183	112	290
Totals: 1948	123	1,114	556	309	247	39	89	11	49	199	173	178	103	244

TABLE I—(Continued)

States	Number of Schools with Various Pupil-Teacher Ratios													Educational Staff										
	Less than 14.1 14.1 16.1 18.0 20.0 22.0 24.0 26.0 28.0 30.1 or more													Not Returning		New to School		Preparation of New Members						
														Men		Women		Total		Men	Women	Total	Ph.D.	M.A.
1. Arizona	7	2	2	2	4	0	0	0	0	0	0	0	17	17	34	20	17	37	1	7	29	0	0	3
2. Arkansas	8	2	3	1	1	0	0	0	0	0	0	0	13	26	39	21	29	50	1	12	36	1	5	6
3. Colorado	11	9	14	6	4	0	0	0	0	0	0	0	83	75	158	105	71	176	0	32	139	5	8	14
4. Illinois	107	20	23	6	1	1	0	0	0	0	0	0	166	248	414	250	280	530	1	116	497	6	8	17
5. Indiana	10	6	2	2	3	1	0	0	0	0	0	0	30	33	63	33	36	69	1	16	52	0	2	6
6. Iowa	16	15	20	6	2	0	0	0	0	1	0	0	81	109	190	115	98	213	0	28	184	1	10	6
7. Kansas	74	24	14	6	2	0	0	0	0	0	0	0	172	178	350	211	194	495	1	61	342	1	6	6
8. Michigan	8	8	9	2	2	0	1	0	0	0	0	0	15	43	58	19	45	64	0	15	49	1	3	2
9. Minnesota	18	2	4	0	5	1	1	0	0	0	0	0	34	68	102	36	59	95	0	19	75	1	0	0
10. Missouri	17	6	7	8	3	1	1	1	0	0	0	0	38	66	104	63	56	119	0	17	96	6	6	6
11. Montana	5	2	9	3	1	0	0	0	0	0	0	0	21	28	49	33	30	63	0	5	57	6	5	0
12. Nebraska	17	31	21	14	11	2	0	0	0	0	0	0	104	131	235	148	110	258	0	28	225	2	3	4
13. New Mexico	1	1	4	3	0	0	0	0	0	0	0	0	13	10	23	20	10	30	0	6	24	0	3	4
14. North Dakota	6	5	4	8	7	6	4	0	1	0	0	0	34	56	90	53	52	105	1	10	103	3	7	7
15. Ohio	12	10	14	21	13	4	3	0	0	0	0	0	68	104	172	98	95	193	0	28	161	4	3	22
16. Oklahoma	22	14	6	2	2	7	1	1	0	0	0	0	70	89	159	111	65	176	0	46	124	3	10	5
17. South Dakota	8	14	13	5	6	2	1	0	0	0	0	0	62	74	136	70	66	136	0	9	115	13	4	1
18. West Virginia	4	3	1	1	2	3	1	1	0	0	0	0	9	12	21	12	9	21	1	6	13	1	0	2
19. Wisconsin	11	2	3	0	1	0	0	1	0	0	0	0	19	26	45	19	29	48	0	7	40	1	0	0
20. Wyoming	6	0	0	2	0	0	1	0	0	0	0	0	10	17	27	19	13	32	0	5	27	0	1	1
Dep. Schools	11	0	0	1	0	0	0	0	0	0	0	0	12	43	55	19	54	73	0	39	31	3	6	0
Totals: 1950	379	176	173	101	66	28	14	3	2	0	0	0	1,071	1,453	2,524	1,475	1,418	2,893	7	512	2,359	58	90	112
Totals: 1948	347	198	148	135	71	33	16	5	0	1	0	0	1,413	1,712	3,125	1,413	1,712	3,125	13	514	2,449	149	195	

TABLE I—(Continued)

States	Salaries of Superintendents (dollars)												Salaries of Principals (dollars)													
	Less than 2,500												None than 2,500													
	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to		
1. Arizona	0	0	0	0	0	2	4	2	1	2	2	0	1	0	0	0	0	0	1	5	1	0	0	0	0	
2. Arkansas	0	0	1	0	2	4	2	0	0	0	0	0	0	2	0	0	2	0	1	1	0	0	0	0	0	
3. Colorado	1	0	0	0	7	12	11	2	1	0	0	0	0	2	1	0	6	0	0	0	0	0	0	0	0	
4. Illinois	0	0	0	0	1	4	5	16	11	5	2	2	0	12	0	3	1	7	29	23	16	11	6	1	2	
5. Indiana	0	0	0	0	0	0	0	2	0	0	1	0	0	3	0	0	0	2	5	7	3	0	0	0	1	
6. Iowa	0	0	0	0	8	24	9	4	0	0	0	0	0	6	1	1	4	1	2	0	0	0	0	0	0	
7. Kansas	0	1	0	0	13	31	13	7	1	0	0	0	0	6	1	0	1	9	21	12	3	0	1	0	0	
8. Michigan	0	0	0	0	4	3	5	3	0	0	0	1	0	7	0	1	3	1	0	1	0	0	1	0	0	
9. Minnesota	0	0	0	0	0	0	3	4	2	0	0	0	0	7	0	0	2	2	2	3	3	0	0	1	1	
10. Missouri	0	0	0	0	7	7	3	0	0	0	0	0	0	11	1	0	2	5	3	2	0	0	2	0	1	
11. Montana	0	0	0	0	0	1	3	8	2	0	0	0	0	2	1	0	0	0	1	2	0	0	0	0	0	
12. Nebraska	0	0	1	2	20	52	14	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	
13. New Mexico	0	0	0	0	0	0	0	2	4	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	
14. North Dakota	1	0	0	0	2	22	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15. Ohio	0	0	0	3	14	18	9	0	0	0	1	0	1	7	0	0	5	9	4	3	0	0	1	0	2	
16. Oklahoma	0	0	0	0	0	3	16	16	0	0	0	0	0	2	0	0	4	2	3	3	6	0	0	0	0	
17. South Dakota	0	0	0	0	20	20	7	1	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	
18. West Virginia	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	6	5	2	1	0	0	0	0	
19. Wisconsin	0	0	0	0	0	1	2	0	0	2	0	0	0	4	0	0	0	1	1	1	0	1	0	0	3	
20. Wyoming	0	0	0	0	1	1	0	2	1	1	0	0	0	0	1	0	0	1	1	0	1	0	0	0	0	
Dep. Schools	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	3	1	2	0	1	0	0	
Totals: 1950	1	1	1	6	97	200	128	69	24	11	3	4	2	72	6	6	27	56	80	68	36	14	10	3	2	10
Totals: 1948	5	0	2	58	209	173	80	11	2	5	0	2	4	74	5	12	53	95	103	37	11	3	1	2	1	4

TABLE I—(Continued)

TABLE I—(Continued)

[illegible]

TABLE II. SUMMARY OF THE 1940-41 ANNUAL REPORTS OF SECONDARY SCHOOLS ENROLLING FROM 200-400 PUPILS

States	Number of Schools		School Organization					Grade 7			Grade 8			Grade 9			Grade 10			
			Years Included					Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
	Six	Four	Three	Other																
	Public	Private	Total																	
1. Arizona	23	0	23	1	20	2	0	20	20	40	20	20	40	1,124	1,093	2,217	1,003	1,068	2,101	
2. Arkansas	44	1	45	21	14	8	2	607	626	1,323	655	659	1,314	1,218	1,375	2,593	1,610	1,794	3,404	
3. Colorado	30	6	36	4	27	4	1	94	122	216	144	126	270	1,427	1,391	2,818	1,529	1,548	3,077	
4. Illinois	111	42	153	4	147	0	2	132	136	268	159	162	321	6,259	7,137	13,796	5,700	7,143	12,933	
5. Indiana	67	1	68	30	30	4	4	881	823	1,704	931	917	1,868	2,672	2,672	5,344	2,581	2,634	5,215	
6. Iowa	76	6	82	4	46	12	20	161	183	344	184	195	379	3,076	3,078	6,154	3,343	3,443	6,786	
7. Kansas	58	2	60	5	43	10	2	137	124	261	125	112	237	1,825	1,674	3,499	2,518	2,391	4,909	
8. Michigan	96	9	105	35	51	13	6	970	982	1,952	1,220	1,216	2,436	3,913	4,097	8,010	4,285	4,667	8,952	
9. Minnesota	41	7	48	1	9	38	0	26	21	47	26	24	50	302	438	740	2,360	2,696	5,056	
10. Missouri	64	19	83	17	56	7	3	375	359	734	443	406	849	3,002	3,101	6,103	2,931	3,119	6,050	
11. Montana	9	1	10	0	10	0	0	0	0	0	0	0	0	453	436	889	396	391	787	
12. Nebraska	42	5	47	6	38	3	0	159	143	302	156	153	309	1,744	1,616	3,360	1,763	1,789	3,552	
13. New Mexico	24	0	24	4	12	7	1	134	131	265	148	160	308	882	828	1,710	1,152	1,128	2,280	
14. North Dakota	15	3	18	2	12	2	2	39	31	70	72	87	159	577	621	1,198	574	689	1,263	
15. Ohio	180	16	196	118	62	10	6	3,612	3,270	6,882	3,522	3,381	6,903	6,287	7,456	13,743	6,246	7,300	13,546	
16. Oklahoma	52	0	52	2	26	23	1	76	52	128	63	63	126	1,371	1,311	2,682	2,564	2,607	5,171	
17. South Dakota	24	1	25	0	17	4	4	0	0	0	0	0	0	814	759	1,573	879	1,016	1,895	
18. West Virginia	79	1	80	55	22	2	1	1,848	1,690	3,538	1,575	1,573	3,148	3,028	3,130	6,158	2,730	2,966	5,696	
19. Wisconsin	52	9	61	49	7	2	2	103	77	180	149	122	271	2,464	2,444	4,908	2,608	2,924	5,532	
20. Wyoming	17	0	17	4	13	0	0	106	116	222	111	166	277	692	652	1,344	549	590	1,139	
Dep. Schools	3	0	3	2	1	0	0	55	33	88	31	33	64	105	96	201	83	70	153	
Totals: 1950	1,107	129	1,236	320	705	156	57	9,645	8,939	18,584	9,754	9,515	19,269	43,235	45,805	89,130	47,584	52,003	99,587	
Totals: 1948	1,077	126	1,203					8,015	7,583	15,598	8,153	8,156	16,309	39,844	44,019	83,863	44,811	50,424	95,235	
Totals: 1947	1,082	123	1,205							16,475			16,802			81,627			94,694	
Totals: 1946	1,053	128	1,181							16,710			17,428			85,349			98,073	
Totals: 1945	1,046	117	1,163							16,369			16,951			84,589			95,367	

TABLE II—(Continued)

States	Pupils Graduating in Less Than		Length of Year in Days Taught in 1949-50										Schools Reporting Inadequate Clerical Help		Schools Reporting Inadequate Custodial Service	
	4-yr. H.S.	3-yr. H.S.	Less than 170	170	171	172 to 173	174 to 175	176 to 177	178 to 179	180 or more	No.	Percent	No.	Percent	No.	Percent
1. Arizona	13	2	0	1	1	9	7	5	0	1	1	4.35	0	0	0	0
2. Arkansas	24	15	0	0	0	15	12	11	6	1	5	11	3	6.7	3	6.7
3. Colorado	22	0	1	0	0	4	4	4	6	17	5	13.8	2	5.5	2	5.5
4. Illinois	42	0	2	0	0	1	15	20	38	77	13	8.5	4	2.6	4	2.6
5. Indiana	66	32	0	0	0	5	17	32	5	9	3	4	3	4	3	4
6. Iowa	13	13	0	0	0	2	3	1	23	53	3	3.65	1	1.21	1	1.21
7. Kansas	7	1	0	0	0	16	21	10	5	8	5	8	0	0	0	0
8. Michigan	27	0	0	6	6	6	7	8	7	71	6	5.7	1	.9	1	.9
9. Minnesota	0	1	1	2	2	28	9	3	2	3	1	2.08	0	0	0	0
10. Missouri	34	5	0	0	0	4	18	23	17	21	6	7.2	4	4.8	4	4.8
11. Montana	6	0	0	0	0	0	0	4	2	4	1	10	0	0	0	0
12. Nebraska	13	1	2	0	0	1	7	17	10	10	5	.106	2	.042	2	.042
13. New Mexico	9	2	0	0	0	10	4	3	0	7	4	1.66	3	12.5	3	12.5
14. North Dakota	8	0	0	0	0	1	8	5	0	4	4	.21	0	0	0	0
15. Ohio	33	6	0	1	1	16	59	64	11	45	18	9.2	3	1.5	3	1.5
16. Oklahoma	14	7	0	0	0	0	0	1	0	51	0	0	0	0	0	0
17. South Dakota	9	21	0	0	0	2	6	5	5	7	2	.08	1	.04	1	.04
18. West Virginia	7	3	0	3	3	26	31	14	2	4	20	36.25	3	3.75	3	3.75
19. Wisconsin	26	1	1	0	0	10	11	5	6	28	1	2.17	0	0	0	0
20. Wyoming	3	0	17	0	0	1	8	6	0	2	1	5.88	0	0	0	0
Dep. Schools	0	0	0	0	0	4	0	0	0	8	0	0	0	0	0	0
Totals: 1950	376	110	24	13	13	161	247	241	145	432	113	9.1	30	2.4	30	2.4
Totals: 1948	72	40	72	40	40	185	262	237	96	311						

TABLE II—(Continued)

States	School Library													
	Librarians		Preparation of Librarians Hours in Library Science					Per Pupil Expenditure						
	Full Time	Part Time	None	1-5	6-15	16-23	24 or more	Less than \$0.50	\$0.50 to 0.99	\$1.00 to 1.49	\$1.50 to 1.99	\$2.00 to 2.49	\$2.50 to 2.99	\$3.00 or more
1. Arizona	14	8	2	1	7	3	9	0	2	2	10	5	1	3
2. Arkansas	19	28	6	10	22	5	4	0	4	22	9	1	7	2
3. Colorado	9	28	6	6	15	3	7	0	4	17	7	2	3	3
4. Illinois	68	139	41	15	64	30	57	0	7	49	33	28	18	18
5. Indiana	24	49	6	2	1	20	41	0	5	26	20	12	2	2
6. Iowa	23	78	40	20	25	5	11	2	5	31	22	12	7	4
7. Kansas	37	31	13	8	24	10	13	1	7	21	18	6	1	6
8. Michigan	46	74	46	13	27	13	20	0	35	22	17	9	3	16
9. Minnesota	22	30	2	1	6	4	39	0	3	19	10	4	3	9
10. Missouri	31	56	18	16	30	8	15	0	8	26	28	8	3	10
11. Montana	5	5	1	2	4	0	3	0	0	3	3	2	1	1
12. Nebraska	15	39	16	15	12	4	3	1	8	22	4	7	3	2
13. New Mexico	17	14	8	2	6	3	12	0	3	7	7	5	0	2
14. North Dakota	6	16	2	4	10	1	5	0	3	10	3	2	0	0
15. Ohio	60	183	98	30	45	26	53	3	22	89	36	21	8	17
16. Oklahoma	16	36	12	4	22	5	9	0	6	19	14	4	3	6
17. South Dakota	4	29	2	7	20	4	0	0	1	12	7	3	0	2
18. West Virginia	31	66	14	15	42	12	14	4	34	34	7	0	1	0
19. Wisconsin	17	47	0	11	26	14	6	1	3	16	14	7	3	5
20. Wyoming	3	16	3	6	7	1	2	17	1	5	5	4	0	2
Dep. Schools	3	0	0	0	0	0	1	0	0	0	0	0	0	3
Totals: 1950	476	972	336	188	415	171	324	29	161	452	274	142	67	133
Totals: 1948	475	986	459	198	401	117	282	30	213	477	231	114	74	63

TABLE II—(Continued)

States	Number of Schools with Various Pupil-Teacher Ratios										Educational Staff														
											Not Returning			New to School		Preparation of New Members									
											Men	Women	Total	Men	Women	Total	Ph.D.	M.A.	Bache- lor Degree	No Degree	Less than 15 hrs. in Ed.	Inade- quate Prep. in Tchg. Field			
Less than 14.1	14.1 to 16.0	16.1 to 18.0	18.1 to 20.0	20.1 to 22.0	22.1 to 24.0	24.1 to 26.0	26.1 to 28.0	28.1 to 30.0	30.1 to or more		24	37.5	61.5	46	40	86	1	16	68	0	0	0	0	0	3
1. Arizona	0	5	8	5	2	3	0	0	0		63	80	143	121	99	220	0	33	176	11	21	39			
2. Arkansas	0	2	6	10	10	5	8	3	1	0	86	71	157	95	84	179	0	30	144	5	7	9			
3. Colorado	1	0	3	9	4	9	3	3	1	0	158	322	480	254	315	569	4	127	430	8	15	5			
4. Illinois	11	14	40	41	20	18	7	1	1	0	98	135	233	156	123	279	70	16	52	1	1	13			
5. Indiana	0	9	9	12	15	15	6	2	0	0															
6. Iowa	5	12	19	23	19	4	0	0	0	0	140	215	355	204	190	394	1	65	325	3	23	3			
7. Kansas	1	4	21	21	6	3	3	0	1	0	81	106	187	120	107	227	0	29	106	2	2	5			
8. Michigan	3	9	16	22	23	16	13	1	0	2	136	185	321	203	219	422	0	94	330	6	6	3			
9. Minnesota	6	5	7	13	14	2	1	0	0	0	57	151	208	86	148	234	0	27	206	1	0				
10. Missouri	4	5	11	11	23	17	3	6	3	0	114	144	258	151	176	327	3	56	252	16	23	13			
11. Montana	0	1	2	2	4	0	1	0	0	0	19	23	42	24	20	44	0	7	36	1	2	2			
12. Nebraska	0	2	7	15	10	10	1	1	1	0	87	94	181	112	86	198	0	28	169	2	3	4			
13. New Mexico	0	2	6	10	4	2	0	0	0	0	60	44	104	77	52	129	2	22	105	0	8	2			
14. North Dakota	1	1	3	1	2	7	2	1	0	0	32	47	79	31	47	78	0	7	72	3	4	2			
15. Ohio	4	11	12	32	42	50	37	5	3	0	105	327	522	309	304	613	0	95	509	9	6	27			
16. Oklahoma	1	0	9	5	18	11	1	0	0	0	83	87	170	127	89	216	0	53	160	3	10	8			
17. South Dakota	1	7	9	4	2	1	1	0	0	0	48	74	122	68	72	140	0	11	109	3	5	0			
18. West Virginia	1	1	3	7	18	18	16	11	4	1	68	89	157	113	90	203	0	38	164	1	3	15			
19. Wisconsin	5	0	8	14	16	11	3	1	2	0	90	136	226	122	126	248	3	37	212	6	2	2			
20. Wyoming	0	2	3	6	3	2	0	0	1	0	20	45	65	42	41	83	0	7	72	1	1	2			
Dep. Schools	0	0	0	1	1	0	1	0	0	0	4	8	12	10	14	24	1	8	12	3	3	4			
Totals: 1950	44	87	199	267	259	203	110	35	20	4	1,663	2,420.5	4,083.5	2,471	2,442	4,913	85	801	3,799	85	145	161			
Totals: 1948	50	83	150	239	262	218	110	56	26	3				2,485	2,869	5,354	12	909	4,246	142	247				

TABLE II—(Continued)

States	Salaries of Superintendents (dollars)													Salaries of Principals (dollars)												
	Less than 2,500													Less than 2,500												
	to 2,500	to 3,000	to 3,500	to 4,000	to 4,500	to 5,000	to 5,500	to 6,000	to 6,500	to 7,000	to 7,500	or more	None	to 2,500	to 3,000	to 3,500	to 4,000	to 4,500	to 5,000	to 5,500	to 6,000	to 6,500	to 7,000	to 7,500	or more	
1. Arizona	0	0	0	0	1	0	8	6	2	0	0	0	0	0	0	0	1	0	2	2	1	0	0	0	0	
2. Arkansas	1	0	3	8	2	0	0	0	0	0	0	0	0	0	0	0	4	13	10	2	2	0	0	0	0	
3. Colorado	4	1	0	4	6	10	0	0	0	0	0	1	1	0	0	2	0	2	4	0	1	0	0	0	0	
4. Illinois	31	4	0	0	4	20	29	13	11	12	3	1	5	0	1	0	0	0	1	8	1	3	1	0	5	
5. Indiana	0	0	0	0	0	16	18	16	6	7	2	0	0	0	0	0	0	0	1	1	0	0	0	1	0	
6. Iowa	3	2	1	5	0	14	10	3	0	0	2	0	0	0	0	0	0	0	9	15	10	7	1	0	0	
7. Kansas	2	0	0	1	6	16	8	12	1	3	0	0	49	0	0	0	0	2	2	4	2	0	1	0	0	
8. Michigan	6	2	0	2	13	23	9	7	0	1	0	0	0	0	0	0	1	6	10	13	9	1	0	1	1	
9. Minnesota	6	0	0	0	0	13	9	6	0	0	0	1	0	0	0	0	0	0	1	4	8	0	0	0	0	
10. Missouri	17	2	2	7	15	9	6	2	0	0	0	0	1	0	0	0	3	7	7	4	0	1	0	0	0	
11. Montana	1	0	0	0	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	2	0	1	1	0	0	
12. Nebraska	0	0	0	1	6	8	0	1	0	0	0	0	0	0	0	0	0	7	13	5	1	0	1	0	0	
13. New Mexico	0	0	0	0	0	4	10	4	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	
14. North Dakota	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	1	9	3	1	0	0	0	0	
15. Ohio	12	0	0	9	35	24	19	13	6	0	0	2	0	0	0	1	5	21	29	10	7	3	0	0	0	
16. Oklahoma	0	0	0	0	5	11	10	1	0	0	0	0	0	0	0	0	1	1	6	6	5	3	3	0	0	
17. South Dakota	1	0	0	0	6	2	3	0	0	0	0	0	0	0	0	0	0	3	9	3	0	0	0	0	0	
18. West Virginia	0	0	0	1	20	44	13	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
19. Wisconsin	7	0	0	0	1	8	7	1	1	0	0	0	0	0	0	0	0	0	9	10	10	1	0	1	2	
20. Wyoming	0	0	0	0	3	7	2	0	0	0	0	0	0	0	0	0	0	1	2	1	0	1	0	0	0	
Dep. Schools	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	
Totals: 1950	92	11	3	33	128	234	156	88	35	25	7	4	56	2	1	0	1	13	54	125	105	59	25	8	4	11
Totals: 1948	86	14	10	82	195	205	77	42	16	7	9	1	4	3	1	0	15	53	155	115	72	23	10	2	3	3

TABLE II—(Continued)

TABLE III.—SUMMARY OF THE 1949-50 ANNUAL REPORTS OF SECONDARY SCHOOLS ENROLLING FROM 500-599 PUPILS

States	Number of Schools		School Organization							Enrollments in Grade 7 through Post-Graduate Work											
			Years Included							Grade 7			Grade 8			Grade 9			Grade 10		
	Public	Private	Total	Six	Four	Three	Other	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total		
1. Arizona	3	0	3	1	2	0	0	66	69	135	36	43	79	270	286	556	270	254	524		
2. Arkansas	18	0	18	11	4	3	0	714	714	1,428	646	593	1,239	1,003	1,021	2,024	1,274	1,369	2,643		
3. Colorado	12	1	13	2	6	5	0	151	145	296	106	141	245	651	668	1,319	1,262	1,393	2,565		
4. Illinois	54	25	79	0	75	2	2	0	0	0	0	0	0	7,774	7,969	15,743	7,280	7,973	15,253		
5. Indiana	43	1	44	12	25	6	1	671	596	1,267	736	596	1,332	3,405	3,435	6,840	3,405	3,855	7,789		
6. Iowa	20	1	21	1	6	12	2	61	54	115	65	78	143	1,048	888	1,936	2,510	2,436	4,946		
7. Kansas	20	2	22	9	7	6	0	588	567	1,155	556	594	1,060	1,137	1,121	2,258	1,034	1,061	3,895		
8. Michigan	56	2	58	20	21	14	3	1,070	956	2,026	1,317	1,211	2,528	3,737	3,465	7,202	5,175	5,131	10,306		
9. Minnesota	23	5	28	1	8	19	0	18	19	37	21	15	36	939	592	1,531	3,315	3,058	6,363		
10. Missouri	21	9	30	3	22	4	1	191	149	340	376	357	733	2,636	2,104	4,740	2,821	2,486	5,407		
11. Montana	3	0	3	0	3	0	0	0	0	0	0	0	0	347	343	690	286	323	609		
12. Nebraska	6	0	6	0	0	3	3	0	0	0	0	0	0	272	259	531	646	621	1,267		
13. New Mexico	7	0	7	3	1	3	0	197	219	416	194	200	394	303	304	607	601	656	1,257		
14. North Dakota	5	0	5	1	1	3	0	48	48	96	44	42	86	168	154	322	498	531	1,029		
15. Ohio	78	6	84	32	33	16	3	2,071	1,875	3,947	2,498	2,511	5,009	6,071	5,653	11,724	7,599	7,407	15,006		
16. Oklahoma	14	0	14	0	7	7	0	0	0	0	0	0	0	710	763	1,473	1,561	1,471	3,032		
17. South Dakota	3	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	374	349	723		
18. West Virginia	53	0	53	29	16	7	1	1,868	1,783	3,651	1,688	1,770	3,458	3,559	3,046	7,496	4,112	4,703	8,815		
19. Wisconsin	38	8	46	10	26	8	1	386	341	727	395	421	816	2,905	2,865	5,770	3,789	4,234	8,023		
20. Wyoming	4	0	4	1	2	1	0	90	98	188	68	73	140	290	248	538	430	423	853		
Dep. Schools	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Totals: 1950	481	60	541	136	268	122	14	8,190	7,634	15,824	8,744	8,554	17,298	37,216	36,084	73,300	49,661	58,654	100,315		
Totals: 1948	450	53	503																		
Totals: 1947	446	54	500																		
Totals: 1946	433	45	478																		
Totals: 1945	402	45	447																		

TABLE III—(Continued)

States	Enrollment in Grade 7 through Post-Graduate Work—(Continued)										Average per School	Number of Graduates in 1949			
	Grade 11			Grade 12			Post-Graduate			Total Enrollment					
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys		Girls	Total		
1. Arizona	221	209	430	197	214	411	0	2	2	1,060	1,977	2,137	168	189	357
2. Arkansas	1,134	1,131	2,265	975	1,093	2,068	3	1	4	5,749	5,922	11,671	913	1,043	1,956
3. Colorado	1,041	1,031	2,072	917	905	1,822	5	2	7	4,131	4,195	8,326	861	986	1,847
4. Illinois	6,225	6,826	13,051	5,897	6,527	12,424	39	33	72	27,215	29,328	56,543	5,914	6,391	12,305
5. Indiana	3,338	3,303	6,631	3,206	3,086	6,292	37	30	67	15,317	14,901	30,218	3,327	3,113	6,440
6. Iowa	2,241	2,145	4,386	2,011	1,964	3,975	59	1	3	7,995	7,758	15,573	2,127	1,982	4,109
7. Kansas	1,677	1,814	3,491	1,447	1,550	2,997	26	11	37	7,365	7,528	14,893	1,400	1,521	2,921
8. Michigan	4,461	4,356	8,817	3,807	4,093	7,900	102	354	456	19,669	19,566	39,235	3,903	4,009	7,912
9. Minnesota	2,923	2,835	5,758	2,745	2,746	5,491	28	9	37	9,989	9,274	19,263	3,009	2,806	5,815
10. Missouri	2,522	2,313	4,835	2,322	2,037	4,359	11	3	14	10,879	9,549	20,428	2,475	2,173	4,648
11. Montana	272	297	569	229	248	477	2	0	2	1,136	1,211	2,347	239	227	466
12. Nebraska	585	620	1,205	534	539	1,071	2	0	2	2,037	2,039	4,076	504	538	1,042
13. New Mexico	481	559	1,040	389	441	830	7	3	10	2,172	2,382	4,554	334	389	723
14. North Dakota	451	495	946	520	457	977	0	0	0	1,729	1,727	3,456	427	521	948
15. Ohio	6,553	6,500	13,053	5,990	6,157	12,147	43	44	87	30,825	30,148	60,973	6,267	6,251	12,518
16. Oklahoma	1,309	1,371	2,680	1,211	1,219	2,430	2	5	7	4,793	4,829	9,622	1,122	1,133	2,255
17. South Dakota	304	418	722	299	340	639	2	1	3	969	1,118	2,087	309	301	610
18. West Virginia	3,225	3,708	6,933	2,825	3,346	6,171	20	19	39	17,288	19,275	36,563	2,658	3,233	5,891
19. Wisconsin	3,683	3,871	7,554	3,356	3,647	7,003	446	299	745	14,960	15,678	30,638	2,651	3,655	6,306
20. Wyoming	395	382	777	353	315	668	2	1	3	1,628	1,339	3,167	339	373	712
Dep. Schools	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals: 1950	43,031	44,184	87,215	39,228	40,924	80,152	836	830	1,666	186,906	188,864	375,770	39,007	40,834	79,841
Totals: 1948	43,150	43,165	86,315	38,069	39,926	77,995	1,101	505	1,606	178,303	175,440	353,743	39,717	38,731	78,448
Totals: 1947			86,015			75,483			1,477			351,591	30,220	35,603	65,823
Totals: 1946			70,524			66,564			1,520			337,011	27,155	37,029	64,184
Totals: 1945			72,966			62,395			1,110			313,643	26,226	33,740	59,966

TABLE III—(Continued)

States	Pupils Graduating in Less Than		Length of Years in Days Taught in 1949-50										Schools Reporting Inadequate Clerical Help		Schools Reporting Inadequate Custodial Service	
			Less than 170	170 to 171	172 to 173	174 to 175	176 to 177	178 to 179	180 or more	No.	Percent	No.	Percent			
	4 yrs. in 4-yr. H.S.	3 yrs. in 3-yr. H.S.														
1. Arizona	8	0	0	0	1	2	8	5	2	0	0	0	0	0	0	0
2. Arkansas	12	2	0	0	2	8	0	4	1	7	0	0	2	11	0	0
3. Colorado	2	26	0	0	1	0	0	1	4	1	7	0	0	7.6	0	0
4. Illinois	83	0	0	0	0	8	0	12	15	44	0	0	2	2.5	0	0
5. Indiana	83	166	0	1	2	8	13	3	17	0	0	0	2	5	2	5
6. Iowa	39	20	0	0	0	1	0	0	5	15	0	0	1	4.76	1	4.76
7. Kansas	2	3	0	0	5	1	7	3	6	0	0	0	0	0	0	0
8. Michigan	273	0	1	1	0	4	2	9	41	0	0	0	0	0	0	0
9. Minnesota	2	7	0	1	15	3	2	1	6	0	0	0	2	7	0	0
10. Missouri	22	11	0	0	0	6	6	3	15	0	0	0	0	0	0	0
11. Montana	1	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0
12. Nebraska	0	10	0	0	0	0	3	0	3	0	0	0	0	0	0	0
13. New Mexico	2	4	0	0	4	1	0	0	2	0	0	0	1	1.42	0	0
14. North Dakota	0	2	0	0	0	1	2	1	1	0	0	0	1	.25	1	.25
15. Ohio	85	64	0	0	2	19	28	6	29	0	0	0	6	7.2	2	2.4
16. Oklahoma	5	9	0	0	0	2	0	0	12	0	0	0	0	0	0	0
17. South Dakota	0	14	0	0	1	0	0	0	2	0	0	0	0	0	0	0
18. West Virginia	66	36	1	1	6	29	14	0	2	8	15.9	0	8	15.9	2	3.77
19. Wisconsin	13	39	0	0	4	4	11	6	21	0	0	0	4	8.69	2	4.347
20. Wyoming	16	3	4	0	1	1	1	1	0	0	0	0	0	0	0	0
Dep. Schools	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals: 1950	714	416	6	4	44	99	110	56	226	30	5.5	10	1.8			
Totals: 1948			20	9	56	85	96	36	195							

TABLE III—(Continued)

School Library														
States	Librarians		Preparation of Librarians. Hours in Library Science					Per Pupil Expenditure						
	Full Time	Part Time	None	1-5	6-15	16-23	24 or more	Less than \$0.50	\$0.50 to 0.99	\$1.00 to 1.49	\$1.50 to 1.99	\$2.00 to 2.49	\$2.50 to 2.99	\$3.00 or more
1. Arizona	3	0	0	0	1	1	1	0	0	1	2	0	0	0
2. Arkansas	11	7	2	0	7	1	8	0	4	8	3	2	1	0
3. Colorado	12	2	1	1	2	0	10	0	5	4	3	1	0	0
4. Illinois	81	22	17	1	8	16	61	0	11	35	17	5	4	7
5. Indiana	37	10	0	1	3	4	38	0	11	21	9	3	0	0
6. Iowa	20	2	1	0	5	4	12	0	5	6	8	1	1	0
7. Kansas	21	6	4	1	8	4	10	0	7	1	7	4	1	2
8. Michigan	56	9	10	6	8	11	28	0	24	12	8	4	2	5
9. Minnesota	28	4	0	1	3	1	27	0	4	10	9	3	0	2
10. Missouri	29	12	4	1	15	5	16	0	10	11	5	1	1	2
11. Montana	3	0	0	0	1	0	2	0	2	0	1	0	0	0
12. Nebraska	5	1	2	0	2	0	2	0	2	3	1	0	0	0
13. New Mexico	7	1	0	0	1	3	4	0	2	2	0	2	1	0
14. North Dakota	4	2	0	0	4	0	2	1	1	2	1	0	0	0
15. Ohio	82	19	15	3	9	9	65	2	41	25	8	4	0	4
16. Oklahoma	12	2	0	0	7	0	7	0	6	5	1	1	0	0
17. South Dakota	2	3	1	0	1	1	2	0	0	2	1	0	0	0
18. West Virginia	52	16	16	2	11	11	28	3	20	18	2	0	0	1
19. Wisconsin	42	7	0	4	16	9	17	0	5	21	10	3	2	1
20. Wyoming	4	0	0	0	1	0	3	4	1	2	0	0	0	1
Dep. Schools	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals: 1950	511	125	73	21	113	80	343	10	170	189	96	34	13	25
Totals: 1948	523	69	75	21	64	40	392	60	184	75	30	7	1	5

TABLE III—(Continued)

States	Number of Schools with Various Pupil-Teacher Ratios												Educational Staff										
	Less than 14.1 14.1 to 16.0 16.1 to 18.0 18.1 to 20.0 20.1 to 22.0 22.1 to 24.0 24.1 to 26.0 26.1 to 28.0 28.1 to 30.0 30.1 or more												Not Returning		New to School		Preparation of New Members						
													Men	Women	Total	Men	Women	Total	Ph.D.	M.A.	Bache- lor Degree	Less than 15 hrs. in Ed.	Inade- quate Prep. in Tchg. Field
1. Arizona	0	0	0	0	1	2	0	0	0	0	0	8	7	15	18	7	25	0	4	21	0	0	0
2. Arkansas	0	0	0	1	1	3	5	4	3	1	0	36	58	94	53	70	123	0	22	96	5	33	20
3. Colorado	0	0	0	4	3	1	4	1	0	0	0	30	35	65	45	29	74	0	17	54	3	4	2
4. Illinois	0	5	2	18	17	19	8	4	5	1	0	138	177	315	222	204	426	1	93	325	7	8	5
5. Indiana	1	1	2	7	9	15	8	1	0	0	0	84	84	169	119	84	203	0	57	140	6	3	13
6. Iowa	0	2	3	4	8	3	1	0	0	0	0	33	40	73	54	37	91	0	13	77	1	7	1
7. Kansas	0	0	0	6	6	5	3	0	2	1	0	81	106	187	120	107	227	0	29	106	2	2	5
8. Michigan	0	2	5	14	15	12	8	1	0	1	0	97	164	261	165	155	320	1	57	261	2	4	1
9. Minnesota	0	0	3	3	8	4	5	3	2	0	0	59	75	134	83	69	152	0	28	122	2	2	0
10. Missouri	0	1	2	6	5	3	5	8	0	0	0	71	80	151	94	73	167	2	32	130	3	4	7
11. Montana	0	0	0	1	1	0	0	1	0	0	0	3	8	11	7	8	15	0	6	9	0	2	1
12. Nebraska	0	0	0	0	2	2	2	0	0	0	0	11	18	29	18	16	34	0	5	29	0	0	0
13. New Mexico	0	0	0	2	3	2	0	0	0	0	0	16	16	32	36	13	49	0	9	40	0	2	0
14. North Dakota	0	0	0	1	0	2	2	0	0	0	0	10	14	24	13	14	27	0	2	25	4	3	1
15. Ohio	0	0	2	7	15	31	12	12	5	0	0	152	168	320	207	142	349	0	65	276	8	8	3
16. Oklahoma	0	1	1	0	7	1	2	2	0	0	0	18	25	43	37	34	71	0	12	42	0	2	0
17. South Dakota	0	0	0	0	1	0	1	1	0	0	0	5	6	11	9	5	14	0	3	11	0	0	0
18. West Virginia	0	0	0	2	2	8	22	6	10	3	0	58	113	171	98	102	200	0	44	152	4	2	15
19. Wisconsin	0	0	0	0	11	9	12	9	2	1	1	64	149	213	84	136	220	11	29	182	0	1	0
20. Wyoming	0	0	0	1	3	0	0	0	0	0	0	5	12	17	13	9	22	0	7	15	0	1	0
Dep. Schools	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals: 1950	1	12	20	88	116	125	97	46	28	8	0	979	1,356	2,335	1,495	1,314	2,809	15	534	2,203	47	88	74
Totals: 1948	0	0	4	17	53	77	105	68	31	8	0	1,506	1,579	3,085	1,506	1,579	3,085	4	579	2,399	103	157	

TABLE III—(Continued)

States	Salaries of Superintendents (dollars)												Salaries of Principals (dollars)												
	Less 2,500 3,000 3,500 4,000 4,500 5,000 5,500 6,000 6,500 7,000 7,500												Less 2,500 3,000 3,500 4,000 4,500 5,000 5,500 6,000 6,500 7,000 7,500												
	None	to	to	to	to	to	to	to	to	to	to	or	None	to	to	to	to	to	to	to	to	to	or	more	
	2,500	2,999	3,499	3,999	4,499	4,999	5,499	5,999	6,499	6,999	7,499	more	2,500	2,999	3,499	3,999	4,499	4,999	5,499	5,999	6,499	6,999	7,499	more	
1. Arizona	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	
2. Arkansas	0	0	0	0	0	1	3	2	3	0	0	0	0	0	0	1	3	3	1	1	0	0	0	0	
3. Colorado	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	5	0	0	0	0	1	0	0	
4. Illinois	0	0	0	0	0	0	0	0	1	2	2	3	22	0	0	0	0	1	7	10	11	5	7	4	
5. Indiana	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	3	10	10	10	2	6	1	
6. Iowa	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	8	3	6	1	0	0	
7. Kansas	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	6	4	7	0	3	0	0	0	
8. Michigan	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	3	14	14	11	3	9	0	0	0	
9. Minnesota	0	1	0	0	0	0	1	0	0	1	0	0	3	0	0	0	2	8	2	1	5	3	1	0	
10. Missouri	0	0	0	0	0	0	1	0	0	0	0	0	8	0	0	1	10	3	0	4	1	1	1	0	
11. Montana	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	
12. Nebraska	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	
13. New Mexico	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	1	1	0	0	0	
14. North Dakota	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	
15. Ohio	0	0	0	0	0	0	0	1	1	2	1	1	6	0	0	8	15	21	10	10	4	0	4	0	
16. Oklahoma	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	2	4	0	0	0	
17. South Dakota	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	
18. West Virginia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	3	2	0	0	0	0	
19. Wisconsin	0	0	0	0	0	0	4	0	1	1	0	0	6	2	0	0	2	1	8	7	8	3	1	0	
20. Wyoming	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	1	0	1	0	0	
Dep. Schools	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals: 1950	0	1	0	0	0	2	8	7	9	8	3	5	48	4	0	0	16	62	87	84	59	52	18	16	6
Totals: 1948	1	1	0	1	0	5	14	13	6	6	3	4	45	3	1	9	48	97	107	72	38	13	7	3	1

TABLE III—(Continued)

Salaries	Salaries of Full Time Male Staff Members (dollars)																														Total				
	None	Less than 2,000	2,000	2,100	2,200	2,300	2,400	2,500	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400	3,500	3,600	3,700	3,800	3,900	4,000	4,100	4,200	4,300	4,400	4,500	4,600	4,700		4,800	4,900	5,000 or more	
1. Arizona	0	0	0	0	0	1	7	6	6	6	8	8	4	5	6	9	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	60
2. Arkansas	0	18	11	11	15	15	7	19	12	9	14	5	6	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	147
3. Colorado	0	0	0	2	21	20	28	36	27	17	7	5	5	4	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	178
4. Illinois	218	0	2	5	37	63	79	88	72	105	126	77	98	56	69	35	15	31	1,176	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,176
5. Indiana	0	0	0	3	6	21	36	34	61	57	78	76	95	56	42	44	30	72	711	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	711
6. Iowa	12	0	0	0	6	11	28	30	28	43	57	54	30	36	9	1	3	3	331	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	331
7. Kansas	0	0	0	0	5	13	20	56	73	51	40	21	15	16	2	0	1	1	314	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	314
8. Michigan	0	1	0	1	12	34	80	70	75	104	131	104	107	69	72	24	23	20	927	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	927
9. Minnesota	19	0	1	1	10	7	18	32	32	49	45	35	47	49	50	17	1	2	415	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	415
10. Missouri	90	2	6	17	28	32	35	37	29	20	29	24	13	9	20	10	2	3	406	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	406
11. Montana	0	0	0	0	1	1	1	0	11	6	14	8	9	2	0	2	1	1	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57
12. Nebraska	0	0	0	1	0	1	6	17	14	8	9	6	3	0	0	0	0	0	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65
13. New Mexico	0	1	0	0	0	3	5	13	16	11	13	12	13	7	5	2	1	0	102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	102
14. North Dakota	0	0	0	0	0	0	3	10	17	14	22	11	7	0	2	1	0	1	88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88
15. Ohio	81	2	6	28	63	85	119	163	180	141	118	125	94	55	51	25	44	1	1,381	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,381
16. Oklahoma	0	0	2	1	5	21	26	26	19	22	14	18	12	10	9	2	0	2	189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	189
17. South Dakota	0	0	0	0	5	5	5	7	9	5	8	7	4	4	0	0	0	0	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54
18. West Virginia	0	52	34	41	67	57	94	55	70	23	24	20	9	4	0	2	0	1	553	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	553
19. Wisconsin	17	10	2	2	9	23	37	56	49	78	70	61	51	56	30	18	7	7	383	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	383
20. Wyoming	0	0	0	2	3	3	3	9	6	10	13	10	2	1	0	1	0	0	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63
Dep. Schools	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals: 1950	437	86	64	115	288	416	637	764	806	781	836	684	626	445	375	185	129	146	7,820	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,820
Totals: 1948	408	40	89	193	413	573	787												6,515	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,515	

TABLE IV.—SUMMARY OF 1949-50 ANNUAL REPORTS OF SECONDARY SCHOOLS ENROLLING 1,000 OR MORE PUPILS

States	Number of Schools		School Organization				Enrollments in Grade 7 through Post-Graduate Work											
			Years Included				Grade 7		Grade 8		Grade 9		Grade 10					
	Public	Private	Total	Six	Four	Three	Other	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total		
1. Arizona	6	0	6	0	5	1	0	0	0	0	0	0	1,337	1,522	2,859	1,668	1,719	3,387
2. Arkansas	3	0	3	1	0	2	0	167	178	345	0	0	91	109	200	531	679	1,210
3. Colorado	8	0	8	1	3	4	0	156	133	289	123	139	805	865	1,670	2,336	2,384	4,620
4. Illinois	76	8	84	0	78	5	1	0	0	0	0	0	22,022	20,103	43,685	21,952	21,268	43,220
5. Indiana	27	0	27	4	21	2	0	364	375	739	298	335	5,727	5,562	11,289	5,854	5,746	11,600
6. Iowa	8	0	8	1	0	3	4	285	339	624	268	312	337	346	683	1,508	1,680	3,188
7. Kansas	7	0	7	1	1	5	0	92	97	189	90	84	388	370	758	1,877	1,928	3,805
8. Michigan	49	2	51	4	23	22	2	498	414	912	562	633	6,553	6,756	13,309	13,960	15,727	29,687
9. Minnesota	11	0	11	0	4	7	0	0	0	0	0	0	584	647	1,231	2,372	2,442	4,814
10. Missouri	23	0	23	1	13	3	6	131	133	264	1,077	993	4,560	4,831	9,391	4,771	5,046	9,817
11. Montana	4	0	4	0	3	1	0	0	0	0	0	0	614	632	1,246	817	790	1,607
12. Nebraska	8	0	8	2	5	1	0	189	206	395	201	168	1,376	1,469	3,045	1,759	1,784	3,543
13. New Mexico	2	0	2	0	1	1	0	0	0	0	0	0	200	102	401	573	601	1,174
14. North Dakota	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15. Ohio	63	2	65	8	29	24	4	1,158	1,066	2,224	1,334	1,205	7,784	8,211	15,995	13,401	13,162	26,623
16. Oklahoma	6	0	6	0	0	6	0	0	0	0	0	0	0	0	0	2,141	2,053	4,194
17. South Dakota	1	0	1	0	1	0	0	0	0	0	0	0	383	377	760	233	230	463
18. West Virginia	11	0	11	4	1	6	0	510	462	972	455	449	556	634	1,190	2,001	2,151	4,152
19. Wisconsin	28	1	29	5	12	11	0	226	194	420	241	189	3,295	2,899	6,194	6,348	6,267	12,615
20. Wyoming	1	0	1	0	1	0	0	0	0	0	0	0	106	151	317	154	141	295
Dep. Schools	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals: 1950	342	13	355	32	201	104	17	3,776	3,597	7,373	4,782	4,647	57,587	56,726	114,313	83,416	83,568	170,024
Totals: 1948	350	13	363					3,120	3,170	6,290	4,553	4,439	55,325	54,820	110,145	86,820	88,527	175,347
Totals: 1947	361	15	376					5,945	5,945	11,890	5,945	5,945	117,814					191,437
Totals: 1946	359	16	375					5,518	5,518	11,036	5,518	5,518	128,005					203,107
Totals: 1945	362	11	377					5,767	5,767	11,534	5,767	5,767	134,030					195,036

TABLE IV—(Continued)

States	Pupils Graduating in Less Than		Length of Year in Days Taught in 1949-50										Schools Reporting Inadequate Clerical Help		Schools Reporting Inadequate Custodial Service	
			Less than 170		170	171	172	173	174	175	176	177	178	179	180	or more
	4 yrs. in 4-yr. H.S.	3 yrs. in 3-yr. H.S.											No.	Percent	No.	Percent
1. Arizona	47	28	0	0	0	0	2	0	1	0	3	0	0	0	0	0
2. Arkansas	23	49	0	0	0	0	2	0	1	0	0	0	0	0	0	0
3. Colorado	90	47	0	0	0	0	0	0	0	4	0	4	0	0	0	0
4. Illinois	348	110	0	1	1	3	1	3	3	9	9	2	3	3.6	1	1.2
5. Indiana	859	6	0	0	0	0	7	0	5	4	4	3	0	0	0	0
6. Iowa	30	40	0	0	0	0	0	0	0	0	0	0	1	12.5	0	0
7. Kansas	1	40	0	0	0	0	2	0	3	0	2	0	0	0	0	0
8. Michigan	468	0	0	0	0	0	0	0	1	1	3	4	4	7.8	1	1.9
9. Minnesota	3	8	0	0	0	0	1	0	0	0	0	0	3	2.72	0	0
10. Missouri	745	3	0	0	0	0	0	0	0	0	2	1	3	13	2	8.7
11. Montana	7	2	0	0	0	0	0	0	0	0	0	0	1	25	0	0
12. Nebraska	137	0	0	0	0	0	1	0	2	0	0	0	1	-125	2	-25
13. New Mexico	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14. North Dakota	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15. Ohio	256	198	0	0	0	0	0	0	2	2	7	4	4	6.2	3	4.6
16. Oklahoma	0	51	0	0	0	0	0	0	2	0	0	0	0	0	0	0
17. South Dakota	21	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
18. West Virginia	0	35	0	0	0	0	1	0	5	3	3	1	0	0	0	9.09
19. Wisconsin	192	64	0	0	0	0	0	0	1	1	2	2	2	4.347	1	2.17
20. Wyoming	13	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Dep. Schools	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals: 1950	3,240	691	1	1	1	1	17	26	39	21	251	22	6.2	11	3.1	
Totals: 1948			20	10	16	28	34	197								

TABLE IV—(Continued)

States	School Library														
	Librarians		Preparation of Librarians, Hours in Library Science					Per Pupil Expenditure							
	Full Time	Part Time	None	1-5	6-15	16-23	24 or more	Less than \$0.50	\$0.50 to 0.99	\$1.00 to 1.49	\$1.50 to 1.99	\$2.00 to 2.49	\$2.50 to 2.99	\$3.00 or more	
1. Arizona	11	0	1	0	1	0	9	0	2	2	2	0	0	0	0
2. Arkansas	5	1	1	0	1	1	3	0	1	2	0	0	0	0	0
3. Colorado	12	2	3	0	1	0	10	0	4	1	3	0	0	0	0
4. Illinois	155	17	43	8	12	8	101	0	47	21	8	2	3	3	3
5. Indiana	36	3	0	1	0	2	36	1	10	9	4	0	2	0	0
6. Iowa	11	8	9	1	1	2	6	0	5	2	1	0	0	0	0
7. Kansas	13	0	2	1	1	0	9	0	3	3	1	0	0	0	0
8. Michigan	74	7	6	5	14	0	52	0	38	5	3	1	0	3	3
9. Minnesota	15	2	0	0	2	0	15	0	2	6	0	3	0	0	0
10. Missouri	31	3	3	1	1	1	28	8	7	5	3	0	0	0	0
11. Montana	4	4	0	1	3	0	4	0	3	0	0	0	1	0	0
12. Nebraska	15	0	2	0	1	0	12	0	7	0	1	0	0	0	0
13. New Mexico	2	0	0	0	0	0	2	0	0	2	0	0	0	0	0
14. North Dakota	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15. Ohio	100	9	27	1	4	4	73	4	40	18	1	0	2	0	0
16. Oklahoma	7	0	0	0	0	2	4	0	5	1	0	0	0	0	0
17. South Dakota	12	2	1	0	1	0	1	0	1	0	0	0	0	0	0
18. West Virginia	3	0	1	0	4	1	8	3	4	4	0	0	1	0	0
19. Wisconsin	35	7	0	3	11	9	17	0	11	12	8	1	0	0	0
20. Wyoming	1	1	0	0	0	0	1	1	0	1	0	0	0	0	0
Dep. Schools	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals: 1950	542	66	99	22	58	30	391	17	190	94	35	7	9	6	6
Totals: 1948	523	69	75	21	64	40	392	60	184	75	30	7	1	5	5

TABLE IV—(Continued)

States	Number of Schools with Various Pupil-Teacher Ratios										Educational Staff											
											Not Returning		New to School		Preparation of New Members							
	Less than 14.1	14.1 to 16.0	16.1 to 18.0	18.1 to 20.0	20.1 to 22.0	22.1 to 24.0	24.1 to 26.0	26.1 to 28.0	28.1 to 30.0	30.1 or more	Men	Women	Total	Men	Women	Total	Ph.D.	M.A.	Bachelor	No Degree	Less than 15 hrs. in Ed.	Inadequate Prep. in Tchg. Field
1. Arizona	0	0	0	0	0	3	3	0	0	0	21	26	47	58	48	105	0	74	32	0	0	2
2. Arkansas	0	0	0	0	1	0	2	0	0	0	9	15	24	10	14	24	0	9	12	2	4	1
3. Colorado	0	0	0	0	0	4	1	3	0	0	12	39	51	32	30	62	0	15	43	4	2	0
4. Illinois	0	0	4	8	16	26	22	2	5	1	208	318	526	205	213	418	2	180	231	5	4	4
5. Indiana	0	0	1	5	4	8	7	1	0	1	48	96	144	78	77	155	0	40	113	2	2	2
6. Iowa	0	0	0	1	2	2	3	0	0	0	16	24	40	22	22	44	0	17	25	2	0	1
7. Kansas	0	0	0	0	0	3	2	1	1	0	9	29	38	18	27	45	0	11	34	0	0	1
8. Michigan	0	0	2	14	5	12	14	4	0	0	120	219	339	162	177	339	0	149	167	13	7	8
9. Minnesota	0	0	0	0	0	3	5	2	1	0	21	29	50	24	20	44	2	12	29	1	0	0
10. Missouri	0	0	0	0	4	6	10	1	2	0	65	84	149	58	70	128	0	52	71	5	9	6
11. Montana	0	0	0	0	0	1	3	0	0	0	4	17	21	16	15	31	0	7	24	0	1	0
12. Nebraska	0	0	0	0	2	0	4	2	0	0	17	44	61	26	31	57	0	14	41	2	2	1
13. New Mexico	0	0	0	0	0	1	0	1	0	0	5	17	22	14	11	25	1	8	16	0	2	1
14. North Dakota	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15. Ohio	0	0	0	5	16	20	18	5	1	0	161	159	320	181	143	324	0	91	220	13	8	5
16. Oklahoma	0	0	0	0	0	2	1	1	2	0	19	20	39	38	21	59	0	22	33	5	7	2
17. South Dakota	0	0	0	1	0	2	1	3	1	3	2	5	7	5	6	11	0	0	11	0	0	0
18. West Virginia	0	0	0	0	0	1	0	0	0	0	23	53	76	42	51	93	0	19	71	3	2	3
19. Wisconsin	0	0	0	2	2	6	11	6	2	0	55	98	153	59	75	134	11	30	90	2	2	1
20. Wyoming	0	0	0	0	0	1	0	0	0	0	1	3	4	3	2	5	0	0	5	0	0	0
Dep. Schools	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals: 1950	0	0	7	36	52	101	107	32	15	5	816	1,295	2,111	1,051	1,053	2,104	16	750	1,269	59	52	38
Totals: 1948	0	0	4	17	53	77	105	68	31	8							8	898	1,713	71	86	

TABLE IV—(Continued)

[illegible]

TABLE V.—SUMMARY OF THE 1949-50 ANNUAL REPORTS OF ALL SECONDARY SCHOOLS

States	Number of Schools		School Organization					Enrollments in Grade 7 through Post-Graduate Work											
			Years Included					Grade 7			Grade 8			Grade 9			Grade 10		
	Public	Private	Total	Six	Four	Three	Other	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1. Arizona	47	0	47	3	40	3	1	98	95	193	88	99	187	3,000	3,224	6,224	3,280	3,318	6,598
2. Arkansas	77	4	81	41	24	14	2	1,695	1,652	3,347	1,552	1,492	3,044	2,504	2,791	5,295	3,613	4,099	7,712
3. Colorado	91	10	101	19	64	15	3	594	469	1,063	576	600	1,176	3,629	3,693	7,322	5,817	5,868	11,685
4. Illinois	376	98	474	10	448	10	6	223	223	446	232	238	470	39,204	39,379	78,583	37,412	39,206	76,618
5. Indiana	156	7	163	58	87	12	6	2,057	1,943	4,000	2,154	2,013	4,167	12,210	12,061	24,271	12,740	12,610	25,350
6. Iowa	156	15	171	8	92	32	39	534	607	1,141	560	622	1,182	5,322	5,434	10,757	8,318	8,769	17,087
7. Kansas	194	15	209	33	149	25	2	1,005	973	1,978	946	875	1,821	5,221	5,035	10,256	8,121	8,333	16,454
8. Michigan	221	23	244	64	116	50	14	2,603	2,430	5,033	3,213	3,180	6,393	14,559	14,988	29,547	23,866	26,151	50,017
9. Minnesota	93	25	118	3	31	84	0	58	55	113	47	39	86	1,878	1,931	3,809	8,382	8,983	17,365
10. Missouri	134	46	180	26	129	15	10	751	696	1,447	1,957	1,813	3,770	10,905	11,060	21,965	11,115	11,586	22,701
11. Montana	33	4	37	0	36	1	0	0	0	0	0	0	0	1,845	1,826	3,671	1,863	1,881	3,744
12. Nebraska	141	16	157	14	134	9	0	395	397	792	497	375	782	5,118	4,916	10,034	5,176	5,793	11,554
13. New Mexico	41	1	42	14	16	11	1	448	460	908	446	452	898	1,535	1,470	3,005	2,420	2,520	4,969
14. North Dakota	60	4	64	9	47	6	2	136	134	270	107	202	309	1,438	1,537	2,975	1,658	1,911	3,569
15. Ohio	387	35	422	208	145	53	16	7,618	6,931	14,549	8,111	7,792	15,903	21,242	22,556	43,798	28,405	29,124	57,529
16. Oklahoma	123	4	127	6	65	52	2	100	90	194	98	92	190	2,743	2,791	5,534	7,273	7,128	14,401
17. South Dakota	76	2	78	0	67	7	4	0	0	0	0	0	0	1,976	1,985	3,961	2,297	2,414	4,621
18. West Virginia	138	2	160	100	43	15	2	4,440	4,116	8,556	3,883	3,956	7,839	7,460	7,984	15,444	9,087	10,943	19,130
19. Wisconsin	127	26	153	22	98	28	5	738	630	1,368	834	765	1,599	8,941	8,489	17,430	13,034	13,682	26,716
20. Wyoming	30	1	31	10	20	1	0	265	278	543	239	238	477	1,286	1,187	2,473	1,275	1,282	2,557
Dep. Schools	15	0	15	8	7	0	0	97	73	170	79	72	141	219	203	422	168	139	307
Totals: 1950	2,736	338	3,074	656	1,838	445	115	23,855	22,338	46,193	25,609	24,915	50,524	152,335	154,541	306,876	195,835	204,849	400,684
Totals: 1949	2,737	319	3,056					22,202	21,087	43,289	24,020	23,553	47,573	146,576	149,110	295,686	180,327	197,849	387,176
Totals: 1948	2,720	319	3,039					20,200	19,387	39,587	21,776	21,807	43,583	143,229	145,838	289,067	104,403	202,698	307,101
Totals: 1947	2,691	334	3,025					40,108			43,993			295,813			412,313		
Totals: 1946	2,701	324	3,025					40,256			43,845			313,108			428,502		
Totals: 1945	2,693	328	3,021					39,300			41,518			316,981			411,676		

TABLE V—(Continued)

States	Pupils Graduating in Less Than		Length of Year in Days Taught in 1949-50										Schools Reporting Inadequate Clerical Help		Schools Reporting Inadequate Custodial Service		
	4 yrs. in 4-yr. H.S.	3 yrs. in 3-yr. H.S.	Less than 170	170 to 171	171 to 172	172 to 173	173 to 174	174 to 175	175 to 176	176 to 177	177 to 178	178 to 179	179 to 180 or more	No.	Percent	No.	Percent
1. Arizona	70	30	0	1	17	16	12	12	12	12	0	1	2	4.26	2	4.26	
2. Arkansas	67	67	0	0	22	25	24	24	24	24	8	2	7	8.6	3	3.7	
3. Colorado	118	74	1	0	18	15	16	13	13	13	101	38	9	8.9	2	1.9	
4. Illinois	488	110	2	1	6	34	71	101	101	101	259	259	29	6.1	6	1.3	
5. Indiana	1,009	204	0	1	17	32	63	12	12	12	12	38	9	6	5	3	
6. Iowa	82	73	0	0	4	10	11	11	11	11	38	108	7	4.09	2	1.11	
7. Kansas	25	47	0	0	68	61	41	12	12	12	12	27	35	16	0	0	
8. Michigan	771	0	2	9	11	14	16	20	20	20	172	172	17	6.9	3	1.2	
9. Minnesota	8	17	3	7	53	14	6	8	8	8	26	26	9	7.6	1	.8	
10. Missouri	806	19	0	0	9	32	44	30	30	30	65	65	16	8.9	7	3.9	
11. Montana	16	2	0	0	0	5	10	4	4	4	18	18	4	10.81	2	5.40	
12. Nebraska	161	11	4	1	11	24	46	25	25	25	46	46	34	.216	7	.04	
13. New Mexico	11	6	0	0	18	6	5	0	0	0	13	13	5	1.10	3	12.5	
14. North Dakota	14	3	0	0	11	21	22	2	2	2	8	8	24	0	0	0	
15. Ohio	375	268	0	1	28	107	124	24	24	24	138	138	41	9.9	9	2.1	
16. Oklahoma	26	74	0	0	0	10	4	1	1	1	112	112	0	0	0	0	
17. South Dakota	34	35	0	2	11	18	22	13	13	13	12	12	9	.11	2	.02	
18. West Virginia	76	74	1	4	36	75	33	3	3	3	8	8	40	25	7	4.37	
19. Wisconsin	231	104	1	0	18	18	25	15	15	15	76	76	7	4.5	3	2	
20. Wyoming	33	3	31	0	5	13	7	2	2	2	4	4	1	5.88	0	0	
Dep. Schools	1	0	0	0	7	0	0	0	0	0	0	8	0	0	0	0	
Totals: 1950	4,422	1,221	45	27	370	550	602	331	331	331	1,179	1,179	305	9.9	64	2.1	
Totals: 1949			15	18	342	528	677	349	349	349	1,122	1,122					
Totals: 1948			160	77	389	615	644	372	372	372	866	866					

TABLE V—(Continued)

States	School Library													
	Librarians		Preparation of Librarians, Hours in Library Science					Per Pupil Expenditure						
	Full Time	Part Time	None	1-5	6-15	16-23	24 or more	Less than \$0.50	\$0.50 to 1.49	\$1.00 to 1.99	\$1.50 to 2.49	\$2.00 to 2.99	\$3.00 or more	
1. Arizona	30	21	7	2	18	5	19	0	4	6	16	9	3	9
2. Arkansas	41	48	14	12	35	8	20	0	9	33	18	4	8	9
3. Colorado	37	79	38	16	30	4	28	0	13	32	18	14	9	15
4. Illinois	326	335	145	69	143	62	242	0	65	112	80	67	57	92
5. Indiana	98	86	8	7	8	34	123	1	26	59	39	16	8	12
6. Iowa	61	161	102	32	44	13	31	5	19	52	42	19	16	18
7. Kansas	92	170	83	44	73	21	41	2	19	38	47	30	25	48
8. Michigan	184	125	75	39	55	25	108	0	102	40	35	18	5	37
9. Minnesota	77	57	4	3	30	5	91	0	10	41	21	14	7	25
10. Missouri	105	124	53	28	62	17	69	8	26	45	44	19	8	29
11. Montana	13	29	5	9	14	2	12	0	5	5	7	10	2	8
12. Nebraska	46	128	56	54	23	9	27	1	25	38	33	32	8	18
13. New Mexico	26	24	10	7	8	7	18	0	5	12	10	10	2	3
14. North Dakota	12	63	21	13	31	2	8	2	8	24	16	7	3	4
15. Ohio	258	287	183	48	72	43	199	9	106	145	64	43	21	34
16. Oklahoma	44	87	23	19	50	12	23	1	19	35	22	18	6	23
17. South Dakota	9	91	19	15	39	5	3	1	1	21	21	15	4	14
18. West Virginia	97	101	38	19	65	25	51	10	69	63	12	0	1	9
19. Wisconsin	96	79	1	19	65	33	55	2	25	54	38	16	6	9
20. Wyoming	8	26	6	8	11	1	7	31	2	9	6	5	2	7
Dep. Schools	10	9	1	0	7	0	6	0	0	0	0	0	0	15
Totals: 1950	1,670	2,130	892	463	883	333	1,181	73	559	864	589	366	201	434
Totals: 1949	1,568	1,805	858	393	797	256	1,060	0	613*	903	546	380	191	391
Totals: 1948	1,591	2,282	1,166	558	836	263	1,078	115	619	952	492	321	186	331

* Less than \$1.00.

States	Number of Schools with Various Pupil-Teacher Ratios										Educational Staff														
											Not Returning		New to School		Preparation of New Members										
	Less than 14.1	14.1 to 16.0	16.1 to 18.0	18.1 to 20.0	20.1 to 22.0	22.1 to 24.0	24.1 to 26.0	26.1 to 28.0	28.1 to 30.0	30.1 or more	Men	Women	Total	Men	Women	Total	Ph.D.	M.A.	Bache- lor	No Degree	Less than 15 hrs. in Ed.	Inade- quate Prep. in Tchg. Field			
1. Arizona	7	2	7	12	6	7	6	0	0	0	70	87.5	157.5	142	112	254	142	112	254	2	101	150	1	1	10
2. Arkansas	8	4	9	12	13	8	15	7	4	1	121	179	300	205	212	417	205	212	417	1	76	321	19	63	66
3. Colorado	12	9	17	19	11	14	8	7	3	1	211	220	431	277	214	491	277	214	491	0	94	380	17	21	25
4. Illinois	118	39	69	73	54	64	37	7	11	2	670	1,065	1,735	931	1,012	1,943	931	1,012	1,943	8	516	1,393	26	35	31
5. Indiana	11	16	14	26	31	39	21	4	0	1	260	349	609	386	320	706	386	320	706	1	183	513	9	8	34
6. Iowa	21	29	42	34	31	9	4	0	1	0	270	388	658	395	347	742	395	347	742	1	123	611	7	40	11
7. Kansas	75	28	35	33	14	11	8	1	4	0	299	381	680	403	394	797	403	394	797	1	130	663	3	9	16
8. Michigan	11	19	32	52	45	40	36	6	0	3	368	611	979	549	596	1,145	549	596	1,145	1	315	807	22	20	14
9. Minnesota	24	7	14	16	27	10	12	5	3	0	171	323	494	220	296	525	220	296	525	2	86	432	5	8	0
10. Missouri	21	12	20	25	35	27	19	16	5	0	288	374	662	366	375	741	366	375	741	5	157	549	30	42	32
11. Montana	5	3	11	6	6	1	4	1	0	0	47	76	123	80	73	153	80	73	153	0	25	126	2	10	8
12. Nebraska	17	13	28	29	25	14	7	3	1	0	219	287	506	304	243	547	304	243	547	0	75	464	10	10	5
13. New Mexico	1	3	10	15	7	5	0	1	0	0	94	87	181	147	86	233	147	86	233	3	45	185	0	15	7
14. North Dakota	7	6	7	10	9	15	8	1	1	0	76	117	193	97	113	210	97	113	210	1	10	200	10	14	10
15. Ohio	16	21	28	65	86	105	70	22	9	0	576	758	1,334	795	684	1,479	795	684	1,479	0	207	1,166	34	25	55
16. Oklahoma	23	15	16	7	27	21	11	0	2	0	190	221	411	313	209	522	313	209	522	0	133	359	11	29	15
17. South Dakota	9	21	22	9	9	4	3	1	0	0	117	159	276	152	149	301	152	149	301	0	23	246	26	9	1
18. West Virginia	5	4	4	11	22	31	40	21	15	7	158	267	425	265	252	517	265	252	517	1	107	400	9	7	35
19. Wisconsin	16	2	11	27	28	29	23	9	5	1	228	409	637	284	366	650	284	366	650	25	103	524	9	5	3
20. Wyoming	6	2	3	9	6	3	1	0	1	0	36	77	112	77	65	142	77	65	142	0	19	119	1	3	0
Dep. Schools	11	0	0	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals: 1950	424	255	399	492	493	457	334	112	65	16	16	51	67	29	68	97	29	68	97	1	47	43	6	9	4
Totals: 1949	419	283	377	440	481	473	316	144	55	19										62	2,642	10,175	400	499	
Totals: 1948	403	285	316	440	489	455	345	186	83	21										37	2,900	10,807	510	685	
Totals: 1947	396	290	353	401	463	486	354	167	83	31										51	3,367	12,370	595	656	
Totals: 1946	380	258	331	383	462	452	394	226	106	33										67	2,858	10,250	1,017	652	
Totals: 1945	445	235	326	369	463	441	378	231	100	29										80	2,862	9,584	879	333	

TABLE V--(Continued)

States	Salaries of Superintendents (dollars)												Salaries of Principals (dollars)												
	Less than 2,500												Less than 2,500												
	None	2,500	3,000	3,500	4,000	4,500	5,000	5,500	6,000	6,500	7,000	7,500	None	2,500	3,000	3,500	4,000	4,500	5,000	5,500	6,000	6,500	7,000	7,500	
	2,500	2,999	3,499	3,999	4,499	4,999	5,499	5,999	6,499	6,999	7,499	more	2,500	2,999	3,499	3,999	4,499	4,999	5,499	5,999	6,499	6,999	7,499	more	
1. Arizona	0	0	0	0	1	3	3	4	3	0	1	1	0	0	0	0	2	5	12	6	2	1	2	2	
2. Arkansas	0	0	0	1	6	18	15	4	5	0	0	0	3	0	0	3	11	6	5	2	1	1	0	0	
3. Colorado	2	0	0	0	9	12	13	6	1	1	0	0	7	2	0	5	13	16	7	0	1	0	1	4	
4. Illinois	0	1	0	0	1	4	6	24	12	9	6	17	72	5	3	1	11	50	50	40	35	24	14	21	
5. Indiana	0	0	0	0	0	0	1	3	0	1	0	1	3	0	0	0	2	22	28	31	17	20	14	17	
6. Iowa	0	0	0	0	8	24	18	19	11	7	1	0	10	3	2	9	1	17	11	12	5	9	4	0	
7. Kansas	0	1	0	0	13	33	15	11	3	0	1	0	8	3	0	2	15	43	24	24	1	8	2	0	
8. Michigan	0	0	0	0	5	9	15	16	9	4	1	1	16	2	1	5	17	37	25	23	4	21	4	0	
9. Minnesota	0	0	0	0	0	0	4	9	10	0	1	0	16	1	0	2	2	17	21	11	8	9	3	0	
10. Missouri	0	0	0	0	10	14	11	4	0	1	0	0	36	3	2	9	21	23	11	4	8	3	12	6	
11. Montana	0	0	0	0	1	0	0	0	0	0	0	0	3	1	0	0	0	2	4	2	4	1	2	0	
12. Nebraska	0	0	1	2	20	59	27	5	2	0	1	0	0	0	0	1	8	11	3	2	4	2	0	0	
13. New Mexico	0	0	0	0	0	0	0	2	5	0	0	1	1	0	0	0	0	6	11	9	3	1	0	0	
14. North Dakota	2	0	0	0	3	23	25	3	2	0	0	0	1	0	0	0	0	1	0	3	1	0	0	0	
15. Ohio	0	0	0	4	19	39	38	10	8	5	2	1	27	0	0	14	52	44	48	37	31	12	6	21	
16. Oklahoma	0	0	0	0	1	4	22	22	7	3	4	0	2	0	0	4	7	15	18	7	5	6	0	0	
17. South Dakota	0	0	0	0	20	23	16	4	0	0	0	0	1	0	1	3	6	2	4	2	1	0	0	0	
18. West Virginia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	27	70	44	11	4	0	0	0	
19. Wisconsin	0	0	0	0	0	1	11	14	10	4	1	1	17	4	0	0	4	10	18	12	19	10	5	2	
20. Wyoming	0	0	0	0	0	1	1	4	2	1	1	0	0	1	0	0	4	8	2	4	1	0	2	0	
Dep. Schools	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	2	0	1	0	
Totals: 1950	4	2	1	7	110	254	247	172	89	44	19	12	27	223	25	9	60	201	402	348	249	161	129	71	78
Totals: 1949	7	0	0	23	106	328	287	140	79	39	14	6	27	212	0	0	98	231	283	220	159	105	75	69	43
Totals: 1948	9	2	2	74	262	333	210	96	32	21	9	9	22	217	23	25	156	348	414	240	204	114	76	79	15
Totals: 1947	0	*	*	346	326	222	106	34	9	14	3	5	18	0	*	*	876	391	219	173	129	52	54	20	5
Totals: 1946	0	*	*	484	334	172	64	31	5	10	5	2	14	0	*	*	1,048	318	191	137	79	53	22	20	19
Totals: 1945	0	*	*	682	210	104	29	23	3	8	2	1	11	0	*	*	1,249	228	154	127	74	50	19	15	6

* Salaries not recorded under above distribution.

TABLE V—(Continued)

States	Salaries of Full Time Male Staff Members (dollars)																			Total
	None	Less than 2,000	2,000 to 2,199	2,200 to 2,399	2,400 to 2,599	2,600 to 2,799	2,800 to 2,999	3,000 to 3,199	3,200 to 3,399	3,400 to 3,599	3,600 to 3,799	3,800 to 3,999	4,000 to 4,199	4,200 to 4,399	4,400 to 4,599	4,600 to 4,799	4,800 to 4,999	5,000 or more		
1. Arizona	0	0	0	0	2	11	23	42	43	53	75	59	48	66	48	32	30	63	595	
2. Arkansas	2	60	44	40	40	57	28	79	45	26	41	11	9	5	3	0	0	0	490	
3. Colorado	21	1	5	13	87	116	124	145	101	80	37	23	18	38	64	1	0	1	876	
4. Illinois	436	58	11	19	88	203	308	451	355	396	459	314	376	273	298	220	157	1,261	5,673	
5. Indiana	16	0	0	0	30	92	114	123	204	176	228	240	271	160	195	129	137	234	2,352	
6. Iowa	14	30	1	2	21	61	137	187	201	227	198	145	128	111	37	10	11	9	1,530	
7. Kansas	8	3	2	2	26	62	124	248	267	265	208	124	120	66	11	1	2	6	1,545	
8. Michigan	0	3	0	4	30	137	246	251	270	307	305	298	323	230	197	185	457	227	3,470	
9. Minnesota	19	2	2	2	30	38	65	110	112	160	135	142	131	90	129	53	6	3	1,227	
10. Missouri	147	14	36	66	131	140	131	161	128	102	87	85	52	40	184	71	6	15	1,594	
11. Montana	6	0	0	0	3	8	16	30	52	31	57	44	34	16	5	5	1	2	310	
12. Nebraska	16	3	0	3	33	68	96	163	133	88	119	88	52	10	4	1	1	0	878	
13. New Mexico	0	1	0	0	0	24	25	46	55	58	75	44	40	30	16	13	5	2	434	
14. North Dakota	?	1	0	0	3	13	17	64	67	62	37	23	22	14	3	1	1	2	330	
15. Ohio	133	52	92	223	383	497	430	462	407	355	393	408	267	232	196	93	208	22	4,853	
16. Oklahoma	0	1	8	21	72	118	98	122	93	80	91	92	64	59	30	19	10	12	900	
17. South Dakota	0	0	1	0	16	52	67	81	69	65	62	30	13	15	4	1	0	1	477	
18. West Virginia	0	132	95	98	185	145	215	132	116	60	49	42	23	15	6	3	1	2	1,319	
19. Wisconsin	29	25	7	14	91	78	126	242	210	221	187	178	200	207	148	54	29	19	1,993	
20. Wyoming	0	0	0	2	4	24	32	43	28	29	33	32	15	8	2	6	0	0	258	
Dep. Schools	0	15	0	0	0	0	0	0	0	0	1	0	20	2	1	0	4	0	43	
Totals: 1950	837	399	302	512	1,203	1,944	2,422	3,182	2,956	2,841	2,877	2,413	2,226	1,687	1,581	898	1,066	1,882	30,970	
Totals: 1949	732	344	308	532	1,326	2,129	2,570	3,330	3,310	2,843	2,832	2,257	1,741	1,128	1,225	986	1,099	674	20,467	
Totals: 1948	755	314	435	846	1,875	2,507	3,128	17,768*											27,628	
Totals: 1947		1,906	1,599	2,291	3,108	3,430	2,843	7,803*											23,130	
Totals: 1946		2,523	1,810	2,213	3,162	2,843	1,988	5,371*											19,910	
Totals: 1945		3,282	2,429	2,559	2,689	2,354	1,388	4,146*											18,847	

* For 1948 and prior years this bracket read "3,000 or more."

TABLE V—(Continued)

States	Salaries of Full Time Female Staff Members (dollars)																			Total				
	None	Less than 2,000	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400	3,600	3,800	4,000	4,200	4,400	4,600	4,800	5,000 or more						
1. Arizona	0	0	0	0	1	15	26	30	28	31	49	37	44	50	45	32	31	60	479					
2. Arkansas	31	294	176	118	88	90	19	52	9	3	0	2	0	0	0	0	0	0	882					
3. Colorado	66	22	20	67	168	162	114	84	57	29	17	13	19	56	55	2	1	0	952					
4. Illinois	707	140	29	51	249	448	513	643	439	300	391	280	313	249	222	179	145	1,978	7,276					
5. Indiana	20	1	5	7	55	158	163	166	171	171	152	254	218	153	215	148	108	293	2,368					
6. Iowa	115	18	14	29	151	350	295	217	139	82	86	58	63	49	16	3	1	1	1,687					
7. Kansas	59	67	13	43	237	402	349	168	97	29	31	78	17	4	0	0	0	0	1,594					
8. Michigan	36	29	13	26	220	374	350	366	235	225	181	173	268	213	161	255	497	167	3,759					
9. Minnesota	0	15	48	3	109	115	203	168	125	78	86	107	48	93	191	45	1	0	1,435					
10. Missouri	190	143	153	233	289	181	140	86	70	65	29	61	57	33	308	156	2	5	2,201					
11. Montana	21	6	0	0	6	13	28	51	43	35	67	21	15	3	7	0	0	0	316					
12. Nebraska	35	20	12	30	107	203	190	75	47	21	51	104	62	7	1	0	0	0	1,115					
13. New Mexico	5	0	0	1	0	48	28	54	59	66	54	45	28	15	11	2	1	2	419					
14. North Dakota	0	4	1	8	25	98	89	45	19	6	6	4	1	0	0	0	0	0	366					
15. Ohio	231	45	112	288	413	447	516	483	360	334	269	334	336	268	318	48	167	9	4,978					
16. Oklahoma	0	7	44	56	274	296	211	101	70	81	119	66	6	3	0	1	0	0	1,335					
17. South Dakota	13	16	24	8	68	88	104	55	42	14	5	0	0	0	0	0	0	0	437					
18. West Virginia	0	179	193	199	319	313	265	185	144	22	8	6	5	5	0	1	0	0	1,844					
19. Wisconsin	87	122	10	18	221	219	200	203	161	117	186	151	112	159	96	37	9	4	2,112					
20. Wyoming	1	6	2	0	12	35	44	35	39	26	16	12	2	1	11	2	0	0	592					
Dep. Schools	0	15	0	0	0	0	3	0	1	0	10	0	57	1	1	0	10	1	99					
Totals: 1950	1,617	1,149	869	1,185	3,072	4,145	3,850	3,267	2,355	1,735	1,813	1,806	1,671	1,362	1,658	881	972	2,430	36,096					
Totals: 1949	1,530	1,587	1,442	1,936	4,144	4,695	3,771	2,745	2,162	1,872	1,894	1,508	1,526	888	1,190	1,264	1,805	361	36,320					
Totals: 1948	1,722	2,271	2,218	3,717	5,331	4,097	3,041	14,397*																36,394
Totals: 1947	0	8,715	5,330	3,966	2,742	2,230	1,808	7,116*																31,997
Totals: 1946	0	14,686	5,080	3,027	2,276	2,122	1,250	5,941*																34,382
Totals: 1945	0	17,568	3,181	1,160	1,694	1,788	1,186	5,316*																32,893

* For 1948 and prior years this bracket read "3,000 or more."

PUBLICATIONS OF THE NORTH CENTRAL ASSOCIATION¹

- I. THE NORTH CENTRAL ASSOCIATION QUARTERLY. Editorial Office, 4019 University High School Building, University of Michigan, Ann Arbor, Michigan
- II. Publications produced or sponsored by Committees or Subcommittees of the Commission on Research and Service
 - A. Unit Studies in American Problems—a new and challenging type of classroom text materials sponsored by the Committee on Experimental Units for the use of students in high school social studies classes. Charles E. Merrill Company, 400 S. Front Street, Columbus 15, Ohio.
 1. *Atomic Energy*, by WILL R. BURNETT
 2. *Conservation of Natural Resources*, by E. E. LORY and C. L. RHYNE
 3. *Housing in the United States*, by A. W. TROELSTRUP
 4. *Latin America and Its Future*, by RYLAND W. CRARY
 5. *Maps and Facts for World Understanding*
 6. *Why Taxes?* by EDWARD A. KRUG and ROBERT S. HARNACK
 - B. Unit Studies for Better Learning—McGraw-Hill Book Company, New York.
 1. *Sprouting Your Wings*, by Bruce H. Guild
 - C. Pamphlets produced as outgrowths of committee studies and projects.
 1. A Study of Teacher Certification
 2. Better Colleges, Better Teachers, The Macmillan Co. New York
 3. A Study of In-Service Education
 4. *Attacking Reading Problems in Secondary Schools* (A new type of publication for teachers; a practical guide for classroom practices).
 5. *Developing Intergroup Relations in School and Community Life*
 6. Better Teaching Through Audio-Visual Materials, by the *Subcommittee on Audio-Visual Study*. (Ten cents.)
 7. Report of the Self-Study Survey of Guidance Practices in North Central Association High School for the School Year 1947-48, by the *Subcommittee on Guidance*. (Ten cents.)
 8. Check List of Elements in a Minimum and an Extended Program of Guidance and Counseling-Information about Pupil
 - D. Syllabus—*Functional Health Teaching*, by LYNDIA M. WEBER. Published and distributed by Ginn and Company, Chicago
- III. Publications of the Commission on Secondary Schools. Distributed free to members of the Commission and member schools
 - A. *Policies, Regulations, and Criteria for the Approval of Secondary Schools*
 - B. *Handbook for State Chairmen and Reviewing Committees*
- IV. Publications of the Commission on Colleges and Universities. Available from the Office of the Secretary, Commission on Colleges and Universities, North Central Association, 5835 Kimbark Avenue, Chicago 37, Illinois.
 - A. *Revised Manual of Accrediting*, July, 1941. \$2.00 (unbound)
 - B. *Home Economics in Liberal Arts Colleges*, by CLARA M. BROWN. Published 1943, under joint sponsorship with the American Home Economics Association. \$1.00
 - C. Reprints from the NORTH CENTRAL ASSOCIATION QUARTERLY and other pamphlets available in limited numbers, free of charge
 1. "Statement of Policy Relative to the Accrediting of Higher Institutions, Operation of the Accrediting Procedure," July 1, 1941

¹ Unless otherwise indicated, address communications to the Executive Secretary, North Central Association of Colleges and Secondary Schools, Administration Building, University of Nebraska, Lincoln, Nebraska.

2. Annual list of institutions of higher education accredited by the Commission on Colleges and Universities
3. "Principles of Freedom in Teaching and Research." An extract from *The Evaluation of Higher Institutions*, Vol. II. *The Faculty*
4. "Report of the Committee on Physical Education and Athletics," June, 1933
5. "Conditions Surrounding the Offering of the Master's Degree," by E. B. STOUTER, October, 1937
6. "Professional Education in Physical Education," by D. OBERTEUFFER, April, 1940
7. "Nursing Education in Higher Institutions of the North Central Association," by LUCILE PETRY, April, 1941
8. "Survey of Music Education in the North Central Association," by ALBERT REIMEN-SCHNEIDER, October, 1941
9. "The Institutional Purposes of Seventy-five North Central Colleges," by MELVIN W. HYDE and EMIL LEFFLER, January, 1942
10. "The Offerings and Facilities in the Natural Sciences in the Liberal Arts Colleges," by ANTON J. CARLSON, October, 1943
11. "Report of the Committee on Postwar Education," April, 1946
12. "Faculty Status in Member Colleges and Universities of the North Central Association of Colleges and Secondary Schools, 1945-46," by JOHN H. RUSSEL and NORMAN BURNS, April, 1948

V. Publications jointly sponsored by the North Central Association and other educational organizations or agencies

- A. *A Guide to the Evaluation of Educational Experiences in the Armed Services*. Published in 1944, in cooperation with the American Council on Education and eighteen other accrediting and standardizing educational associations. Order from the American Council on Education, 744 Jackson Place, Washington 6, D. C. \$5.00.
- B. Publications of Cooperative Study of Secondary School Standards. Available from 744 Jackson Place, Washington, D. C.
 1. *How to Evaluate a Secondary School* (1940 Edition), paper, \$1.10
 2. *Evaluative Criteria* (1950 Edition), paper \$2.50; set of separate sections \$2.50 each
 3. *Educational Temperatures* (1940 Edition), \$1.25

Note: For price list for complete 1950 edition of *Evaluative Criteria* including separate sections, see page 261 of this issue.

VI. *A History of the North Central Association*, by CALVIN O. DAVIS, 1945. Pp. xvii+286, \$2.00 plus postage.

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